# CITY OF LEEDS.

# REPORT

ON THE

# Health and Sanitary Administration

OF THE CITY

FOR THE YEAR 1924.

BY

J JOHNSTONE JERVIS, M.D., D.P.H.,

Medical Officer of Health.

# TABLE OF CONTENTS.

NATURAL AND SOCIAL CONDITIONS	5.					DAGE
Area and Population						PAGE
D. C. L.	• •	• •	• •	• •	• •	9
VITAL STATISTICS—	• •	• •	• •	• •	• •	IO
				74,		тт
Marriages Births	• •		-	• •	• •	II
	• •		• •	• •	• •	II
Birth-rate in Quarters Excess of Births over Deaths	• •		• •	• •	• •	12
	• •		• •	• •	• •	12
Illegitimate Births Deaths	• •		• •	0 0	• •	15
	• •		• •	• •	• •	15 16
Death-rate in Quarters  Death-rate in Wards	• •		• •	• •	• •	16
	• •		• •	• •	• •	16
	• •		• •	• •	• •	
Housing and Death	• •		• •	• •	• •	22
Deaths in Age Groups	• •		• •	• •	• •	22
Infantile Mortality	• •		• •	• •	• •	. 24
Comparison with Other Towns			• •	• •	• •	28
CREMATION	• •		• •	• •	• •	24
Hospital Accommodation	• •	• •	• •	• •	• •	26
SANITARY CIRCUMSTANCES.						
Drainage and Sewerage						29
Carria Dianagar	• •	• •	• •	• •	• •	29
Scavenging and Cleansing	• •	• •	• •	• •	• •	_
A	• •	• •	• •	• •	• •	29
CLOSET ACCOMMODATION	• •	• •	• •	• •	• •	30
Public Conveniences	• •		• •	• •	• •	30
SANITARY ADMINISTRATION—	• •	• •	• •	• •	• •	32
Staff						22
Sanitary Inspection of District			• •	• •	• •	32
Notices		• •	• •		• •	33
Notices Legal Proceedings	• •	• •	• •	• •	• •	33
Underground Sleeping Rooms				• •		33
Common Lodging Houses			• •	• •		33
University Lodgings		• •	• •		• •	36
Residential Flats	• •		• •	• •	• •	38
C 1 TO 1			• •	• •	• •	38
77 3 (F)			• •			38
Ice Cream—Street Vendors and	٠.	Choda	• •	• •	• •	39
			• •	• •	• •	39
Cellar Dwellings		• •		• , •		40
Offensive Trades			• •	• •		40
Factories and Workshops			• •			41
Plans	• •	• •	4 4	• •	• •	45
Work of Women Inspectors		• •	• •	• •	* *	45
Outworkers			• •	• •		45
Rat repression			• •	• •	• •	46
Rag Flock	• •		• •	• •	• •	47
Fertilisers and Feeding Stuffs			• •	• •	• •	47
SMOKE						48
Sunshine and Rainfall						50

D.							PAGE
Cows and Cowsheds				• •			52
MILK AND FOOD ANALYSIS							55
Guinea Pig Tesis							56
TUBERCULOUS MILK FROM O							56
MILK AND CREAM REGULATI							56 5
FOOD AND DRUGS							57
MEAT—	• •	• •	• •	• •	• •	• •	37
Private Slaughter-houses	~1						<i></i>
		• •		• •	• •	• •	57
Meat Inspection							60
Tuberculous Carcases		• •		• •	• •	• •	61
ECTIOUS AND OTHER DIS	EASE	s.					
SMALLPOX							62
MEASLES							64
WHOOPING COUGH							65
SCARLET FEVER							65
ERYSIPELAS							66
Puerperal Fever							67
ENCEPHALITIS LETHARGICA							68
Acute Anterior Polio-Myr				• •			69
CEREBRO-SPINAL MENINGITIS				• •	• •	• •	
				• •		• •	69
DIPHTHERIA				• •	• •	• •	69
Enteric Fever					• •	• •	70
Malaria, Dysentry and T	RENCH	FEV:	ER				70
OPHTHALMIA NEONATORUM							70
DIARRHŒA AND ENTERITIS							72
Influenza							74
BRONCHITIS AND PNEUMONIA	λ						75
CANCER							78 78
Overcrowding and Diseas		• •		• •			81
Infectious Diseases Hospi			• •	• •	• •		
		• •	• •	• •	• •	• •	81
AMBULANCE WORK AND DIS		TION		• •			82
Bacteriological Work					• •		83
							85
Statistics							85
Work of Treatment Cen	tre						85
Institutions							88
Supply of Salvarsan Sul							90
Pathological Work							_
Education and Propagar		• •		• •			90
			• •	• •	• •	• •	90
	• •		• •		• •		91
Statistics			• •		• •		93
Institutional Treatment						• •	105
Accommodation for Chil	dren						109
Central Dispensary							109
Contacts							III
Domiciliary Work							III
Care Work		• •					112
Report of Dr. Fernanda	7					• •	
Report of Dr. Fernande	2	• •		• •			113
TERNITY AND CHILD WEI	LFAR	E.					
Statistics	• •	, .					116
Death-rate in Quarters					• •		117
Deaths in Age Groups							120
Neo-natal Death-rate							124
Causes of Infant Death							
		• •	• •		• •	• •	124
Illegitimate Death-rate		3 0				, .	I24

MATERNITY AND CHIL	D WEL	FARE-	Con	tinued.			F	AGE
Supervision of Mid	WIVES-	_						
Number of Midv	vives							124
Inspection of Mi	dwives							125
Advising Medica								126
Midwives' Emerg								126
Puerperal Fever								126
Handywomen								126
STILL-BIRTHS								127
								128
NATAL WORK		• •						129
Illegitimate Birt	hs in Ir	istituti	ons					130
MATERNAL MORTALIT	Y							131
Post-natal Work					- · ·			132
Home Visiting								132
Infant Welfare (								133
Infant Consultat								135
Leeds Babies' W								138
MILK DISTRIBUTION								139
THE INFANTS' HOSPI								142
								144
RESIDENTIAL NURSE	RY							144
CONVALESCENT TREA								145
HOUSING.								
Number of Houses								146
New Houses								146
Housing Shortage								147
								148
Unfit Houses								148
UNHEALTHY AREAS								149
C 111111111111111111111111111111111111	• •	. •	• •	• •	• •	• •	• •	149
PROPAGANDA	• •		• •			• •		151
STAFF CHANGES								151
MINISTRY OF HEALTH	TABL	ES				b - 0	152 to	155
CHARTS—.  BIRTH RATE, 1890-19  DEATH RATE, 1890-19  INFANT MORTALITY DEATH RATE  CANCER DEATH RATE  TUBERCULOSIS DEATH	E, 1091-	1924				opposi	"	e 12 20 118 78

## PUBLIC HEALTH COMMITTEE.

LORD MAYOR (Charles Granville Gibson).

Chairman: Alderman C. H. Moorhouse, M.B., Ch.B.

Alderman H. Brown.
,, P. T. Leigh.
,, R. H. Blackburn.
,, F. Fountain.

Councillor A. A. Roberts, M.B., Ch.B., B.Sc.

J. S. LOGAN, L.R.C.P.

Councillor G. F. KELLY.
W. COTTAM.

B. GREEN.

C. J. G. Exley, L.M.S.S.A. (Deputy

Chairman).

W. O. Fox.

## SUB-COMMITTEES.

## AUDIT.

Chairman: Councillor A. A. Roberts.

Alderman C. H. Moorhouse.

Councillor C. J. G. EXLEY. ,, W. O. Fox.

Councillor W. COTTAM.

#### MATERNITY AND CHILD WELFARE.

Chairman: Councillor J. S. LOGAN.

Alderman C. H. Moorhouse.

P. T. LEIGH.

R. H. BLACKBURN.

F. FOUNTAIN.

Councillor W. COTTAM.

C. J. G. Exley. W. O. Fox.

#### CO-OPTED MEMBERS.

Mrs. E. KITSON CLARK.

Mrs. CANDLER.

Mrs. C. Exley.

, ,

Mrs. Austyn Barran.

#### TUBERCULOSIS.

Chairman: Alderman C. H. Moorhouse.

Alderman H. Brown.
,, P. T. Leigh.
,, R. H. Blackburn.
,, F. Fountain.

Councillor A. A. ROBERTS.
,, J. S. LOGAN.

Councillor G. F. KELLY.
,, W. COTTAM.
,, B. GREEN.

C. J. G. EXLEY. W. O. Fox.

#### SEACROFT HOSPITAL.

Chairman: Councillor C. J. G. Exley.

Alderman C. H. Moorhouse.

, ,

H. Brown. P. T. Leigh.

R. H. BLACKBURN.

, , F. FOUNTAIN.

Councillor A. A. Roberts.

Councillor J. S. Logan.

G. F. KELLY. W. COTTAM.

B. GREEN.

W. O. Fox.

## JOINT DAY NURSERIES.

Representing Maternity and Child Welfare Committee.

Councillor J. S. LOGAN.
,, W. O. Fox.

,,

W. COTTAM.

Representing Education Committee.

Alderman D. B. Foster. Councillor J. Wormald.

Mrs. Hoyland Smith.

Representing Leeds Day Nurseries Association:

Mrs. W. H. CLARKE. Mrs. G. Halbot (Chairman). Mrs. A. E. Ives.

# PUBLIC HEALTH STAFF.

Medical Officer of Health and Chief Tuberculosis Officer.	J. JOHNSTONE JERVIS, M.D., D.P.H.
Assistant Medical Officer of Health	A. STUART HEBBLETHWAITE, M.C. M.B., Ch.B., D.P.H.
Assistant Medical Officer of Health for Maternity and Child Welfare and Medical Officer of Infants' Hospital	Nora F. Smith, M.B., B.S., D.P.H.
Assistant Medical Officers for Maternity and Child Welfare.	MARION E. MACKENZIE, M.B., Ch.B. MAY I. T. MELDRUM, M.B., Ch.B., D.P.H.
	CECILIA SHISKIN, B.A., M.B., Ch.B. HARRY M. HOLT, M.B., Ch.B.
Consulting Clinical Tuberculosis Officer	H. de Carle Woodcock, M.D., M.R.C.S., F.R.C.P. (Edin.), D.P.H.
Acting Chief Clinical Tuberculosis	
Officer and Assistant Medical Officer of Health	Z. P. FERNANDEZ, M.D., Ch.B., D.P.H.
Assistant Clinical Tuberculosis Officer	ALEXANDRENA M. MACLENNAN, M.D. Ch.B.
Medical Superintendents—	
Infectious Disease Hospital (Seacroft).	A. E. PEARSON, M.R.C.S., L.R.C.P.
	W. A. TODD, M.B., Ch.B. H. M. HOLT, M.R.C.S., L.S.A., D.P.H.
Venereal Diseases Officer	J. P. Вівву, М.В., Сh.В., М.R.С.Р.
Assistant Medical Officer for Venereal	I) I Microviov M.P. Ch.P.
Disease	
Do. do	
City Bacteriologist	J. W. McLeod, M.B., Ch.B.
Veterinary Assistant	J. A. DIXON, M.R.C.V.S.
City Analyst	B. A. Burrell, F.I.C., F.C.S.
Chief Sanitary Inspector	A. STUART HEBBLETHWAITE, M.C., M.B., Ch.B., D.P.H.
Divisional Inspectors	E. STANDISH. G. F. MARSHALL vice M. CARTER from March.
Removal Officer	D. FERGUSON.
Principal Clerks—	
Finance Statistics	J. W. RIDSDALE. J. S. HOYLE.
Sanitary	A. Sparks.
Infectious Diseases	H. O. PEAKE.

# CITY OF LEEDS.

To the Chairman and Members of the Health Committee. Gentlemen,

I have pleasure in presenting my Annual Report for the year 1924. Progress continued to be made in all departments of public health activity in the City and though, judged by the vital statistics, the year was not so favourable as its predecessor, it must be borne in mind

that in some respects 1923 was phenomenal.

The birth-rate continued to fall though the decrease was relatively less than between any two succeeding years since 1920. The deathrate in consequence of the prevalence of influenza of a peculiarly malignant form at the beginning of the year, rose to a figure higher than in any year since 1920, whilst the infant mortality rate for the

same reason showed a corresponding increase.

As far as diseases of an infectious nature are concerned, with the exception of measles, the City was practically free from epidemics of any kind. The incidence of tuberculosis for the year was somewhat higher than for the previous year, but the death-rate remained unchanged. The scheme for the treatment of this disease adopted by the Corporation in 1918 was advanced a step further towards completion by the appointment of a whole time Clinical Tuberculosis Officer and the opening of a sanatorium school at "The Hollies," Weetwood. parts of the scheme which have yet to materialise are the reconstruction of the Dispensary and the building of a new sanatorium. former is in progress and the latter is at present the subject of negotiation. A new sanatorium for women and children is urgently needed.

As regards Maternity and Child Welfare, the work of this department continues to grow. During the year the Committee has increased its provision for maternity cases by the addition of more beds for lying-in women, the opening of a special block at Seacrost Hospital for septic cases, the appointment of a Consultant in Obstetrics to give advice and assistance to medical practitioners in difficult cases, and the provision of special maternity outfits for poor cases. The object is to reduce the maternal mortality which, though not excessive in Leeds,

is much higher than it ought to be.

There is need for greater co-ordination between the Public Health and School Medical Services. Amalgamation of the two would make for both efficiency and economy. With goodwill and understanding there is no reason why such amalgamation should not take place, and I venture to hope that steps in this direction will be taken at an early

The Hospital provision in the City is far from adequate, and I would particularly direct your attention to my remarks on this subject

on page 26.

I wish to acknowledge once more my indebtedness to the members of my staff who have so loyally and efficiently assisted me in carrying on the functions of the department throughout the year. Similarly, I should like to take the opportunity of proffering my thanks to you, Sir, and the Members of the Health Committee for your unfailing kindness and courtesy.

I am, Gentlemen,

Your obedient Servant,

J. JOHNSTONE JERVIS.

Public Health Department, Leeds, August, 1925.

# SUMMARY, 1924.

LATITUDE 53'48° North. LONGITUDE	E 1'32° W	Fest.		
AVERAGE HEIGHT ABOVE SEA LEVE	L 250 fee	ŧ.		
AREA OF CITY			28,089 <u>3</u>	Acres.
POPULATION (Registrar-General's estimat	c)		471,600	
ESTIMATED NUMBER OF HOUSES .			115,289	
RATEABLE VALUE		· · £	2,964,661	
SUM REPRESENTED BY A PENNY RA	TE		£11,587	
				verage.
BIRTH RATE (births per 1,000 living) .				20.32
MARRIAGE RATE (persons married per 1,0	ooo living	)	16.59	17.89
DEATH RATE (deaths per 1,000 living).			14.31	15.42
NATURAL INCREASE OF POPULATION (Excess of births over deaths in the year			1,811	2,244
INFANT MORTALITY RATE			108	116
DEATH RATE from Pneumonia and Brone	chitis			2.41
" Cancer			1.35	1.18
" Diarrhœa and Enteritis	(under 2 y	rears)		
per 1,000 births .			12.04	19.35
	ases. ra		Deaths.	Death rate.
	256 2.	66	20	0.04
DIPHTHERIA	289 0	QI	27	0.00
TYPHOID FEVER	25 0.	05	6	0.01
MEASLES 7,9	037 14	92	46	0,10
PULMONARY TUBERCULOSIS 1,	191 2.	53	513	1.09
OTHER FORMS OF TUBERCULOSIS	180 0.	,8	144	0.31

## CITY OF LEEDS.

# NATURAL AND SOCIAL CONDITIONS.

Area.—28,089 $\frac{3}{4}$  acres.

Population.—The adjusted population at the census of 1921 was 465,500, and at the middle of the year 1924 as estimated by the Registrar General it was 471,600 which is an advance of 1,700 on the population for 1923 and of 6,100 on the census population.

Owing to the movement of the population brought about in consequence of the completion of certain of the Corporation's Housing Schemes it has been found necessary to adjust the figures of population for the various wards. This adjustment was made

## POPULATION IN WARDS.

Ward.	Census, April 2nd, 1911.	Census, June 19th, 1921.	Adjusted population, 1921.	Estimated population middle of 1924.
Central North North-East New Ward* East South East Hunslet† West Hunslet Holbeck Mill Hill West North-West Brunswick New Wortley Armley & Wortley Bramley Headingley  City	14,503 41,968 36,239  34,701 12,562 33,562 35,766 29,679 5,856 20,553 30,570 23,219 16,714 37,419 23,937 48,302	12,528 42,423 36,011 7,814 35,272 12,817 35,264 36,129 29,441 5,286 22,029 31,531 23,930 17,773 36,762 23,481 49,741 458,232	12,727 43,096 36,582 7,938 35,832 13,020 35,823 36,702 29,908 5,370 22,378 32,031 24,310 18,055 37,345 23,853 50,530 465,500	12,703 43,128 36,846 9,205 36,030 13,020 37,673 36,428 29,850 5,303 22,196 31,872 24,133 18,104 37,654 24,623 52,832

<sup>\*</sup>Roundhay, Seacroft, Shadwell, and Crossgates added to Leeds, Nov-

ember, 1912. (1911 Census, 7,398).
†Including Middleton added to Leeds, April 1st, 1920. (1911 Census, 1,207).

in collaboration with the City Engineer who supplied the information as to the part of the City from which the tenants of the new houses had come. The number of names dealt with was 2,892, representing a population of about 8,700, and it involved a good deal of labour in tracing the persons affected and allocating them to the wards in which their domicile now is.

The estimated population in the various wards of the City is given in the accompanying table.

Rateable Value.—The rateable value of the City was £2,964,661 and the sum represented by a penny rate was £11,587.

MARRIAGE RATE.

Year.	Leeds.*	England and Wales.
1914	16.6	15.9
1915	$20 \cdot 2$	19.4
1916	15.5	14.9
1917	14.2	13.8
1918	15.5	15.3
1919	21 · 2	19.7
1920	23.5	20.2
1921	18.7	16.9
1922	17.2	15.7
1923	16.3	15.2
1924	16.3	15.3

<sup>\*</sup> Registration districts are based on the areas of Poor Law Unions, of which there are four in Leeds, but the boundaries of the Unions do not coincide with those of the City. The whole of the Leeds Union is within the City, but only parts of the Hunslet, Holbeck and Bramley Unions. The Hunslet Union includes Templenewsam and Rothwell, Holbeck includes Churwell, and Bramley Union includes Gildersome.

## VITAL STATISTICS.

Marriages.—The number of marriages registered during the year was 4,023, an increase of 22 on the figure for the previous year. It should be noted that this figure includes marriages in the registration districts\* of Leeds, Hunslet, Holbeck and Bramley which themselves include other districts outside the City. For this reason it is not possible to separate the Leeds marriages from the total registered in all these districts, hence one cannot ascertain accurately the marriage-rate for the City. The rate (inclusive) for 1924 was 16·3 the same as for the previous year.

Now that the amalgamation of the four Unions within the City boundary has been consummated in accordance with the provisions of the Leeds Corporation Act, 1924, it will be possible in future years to make a more accurate computation of the marriage-rate for the City.

Births.—The number of births registered in the City during the year was 8,862, comprising 4,583 males and 4,279 females. Of these, 190 males and 200 females were born to parents belonging to districts outside the City, and have therefore been deducted from the total, whilst to the total have been added 40 males and 46 females, born outside but belonging to Leeds parents, making a nett total of 8,558 made up of 4,433 males, and 4,125 females. Compared with the figures for the previous year this is an increase of 126 males, and a decrease of 154 females or a total decrease of 126.

The birth-rate was 18·1 as compared with 18·5 for the previous year and an average rate of 20·5 for the previous five years which means that 943 fewer children have been born than would have been had the rate remained the same as the average of the five preceding years. This is the lowest birth-rate ever recorded in the City with the exception of the war years 1917, 1918 and 1919.

The descent of the birth curve has continued since 1920 but in recent years it has lost its steepness and is gradually flattening out. Between 1920 and 1922 the rate of decline was as much as 5.2 per thousand of the population (or 20.8 per cent.), whereas between 1922 and 1924 it was only 1.7 per thousand (or 8.6 per cent.).

<sup>\*</sup> See footnote to table on opposite page.

Whether the rate will continue to drop depends very largely on how soon the economic conditions of the country return to normal and trade revives to such an extent as to relieve the population of the present burden of unemployment. One of the most important reasons for the continued shrinkage of the birth-rate is undoubtedly the difficulty of obtaining domestic help. This applies to the middle, more perhaps than to any other class, for it is in this section of the community that the shortage of domestic labour is most felt. The housing shortage is also a factor of some importance because a considerable proportion of young married couples are compelled to live with relatives in small flats or furnished rooms, conditions which are altogether unsuitable for the rearing of children.

Of the eleven large towns in England and Wales having populations over 250,000, with the exception of our neighbour Bradford, Leeds had the lowest birth-rate in 1924.

The table on page 14 shows the distribution of births in the various wards. In nine of the wards, namely, South, East, East Hunslet, New Wortley, West, North-East, Holbeck, New Ward\* and Central, the rate was higher than for the whole City, whilst in the remainder it was below. The ward with the highest rate was South, followed by East, East Hunslet, New Wortley and West, all of which were above 20. These wards are largely populated by the working class.

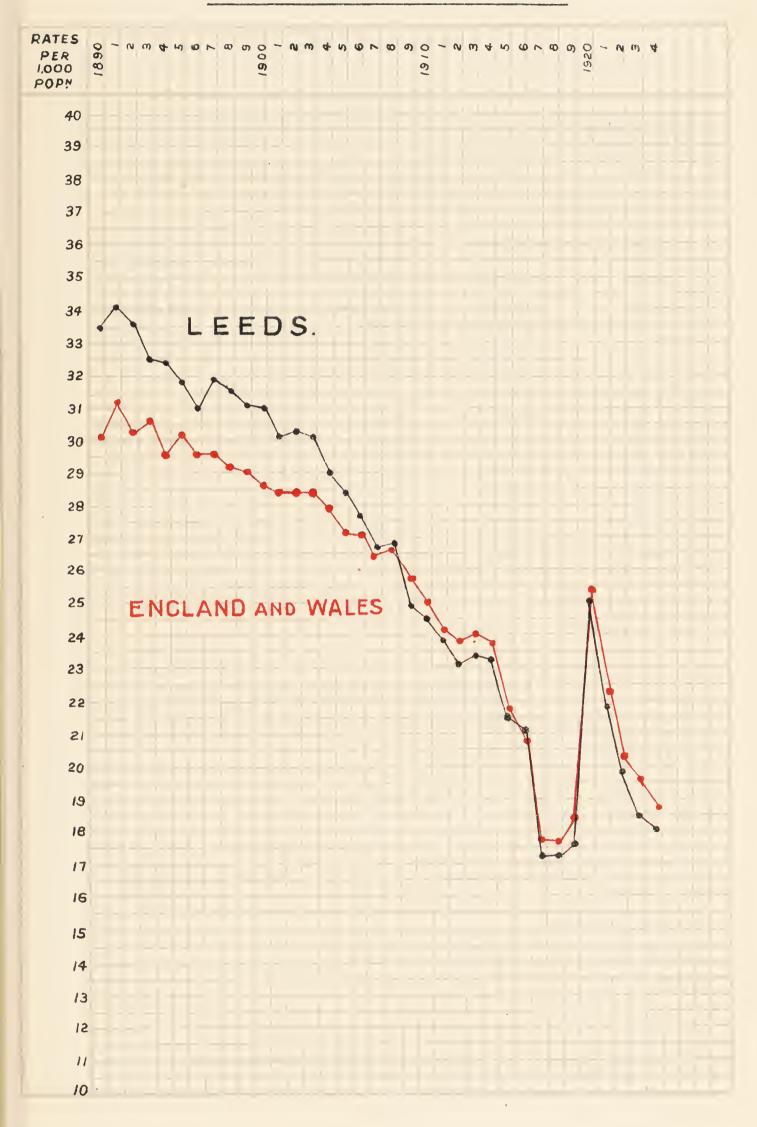
Details respecting notification and visitation of births are given on pages 132 and 133.

Birth-rate in quarters.—With the exception of the fourth quarter which had a rate as low as 16.8, the birth-rate for the other three quarters were pretty much on a level.

Excess of births over deaths.—The excess of births over deaths, or what is generally spoken of as the "natural increase of population" was 1,811 as compared with 2,698 for last year. The balance on the year's working was therefore less than one half per cent. of the whole population.

<sup>\*</sup> Roundhay, Seacroft, Shadwell and Crossgates.

## BIRTH RATE, 1890-1924.





BIRTH RATE.

Year.	No. of births.	Birth rate, LEEDS.	England and Wales.
1890-1894          1895-1899          1900-1904          1905-1909          1910-1914          1915          1916          1917          1918          1920          1921          1923          1924	62,270 63,873 64,791 59,117 53,267 9,877 9,432 7,566 7,392 7,564 11,229 10,144 9,253 8,684 8,558	33·2 31·5 30·1 26·9 23·6 21·5 21·1 17·3 17·3 17·6 25·0 21·8 19·8 18·5 18·1	30·5 29·6 28·4 26·7 24·2 21·9 20·9 17·8 17·7 18·5 25·5 22·4 20·4 19·7 18·8

BIRTH RATE IN QUARTERS.

		I.	II.	III.	IV.	Year.
1917		19.2	18.0	16.2	15.7	17.3
1918		17.4	16.8	17.8	17.1	17.3
1919		13.6	14.6	17.5	24.4	17.6
1920		30.1	25.6	23.7	20.8	25.0
1921		21.9	22.4	22.2	20.7	21.8
1922		21.2	20.7	19.5	17.9	19.8
1923		18.9	19.5	18.1	17.4	18.5
1924	• •	18.4	18.4	18.4	16.8	18.1

BIRTHS AND BIRTH RATE IN WARDS.

Municipal Ward.	Estimated Population middle of 1924.	Nett births.	Birth- rate.	Illegiti- mate births.	Percentage of illegitimate births to total births.
Central	12,703	233	18.34	13	5.6
North	43,128	616	14.28	34	5.2
North-East	36,846	736	19.98	37	5.0
New Ward*	9,205	176	19 · 12	4	2.3
East	36,030	830	23 · 04	33	4.0
South	13,020	321	24 · 65	27	8.4
East Hunslet†	37,673	864	22.93	35	4.1
West Hunslet	36,428	530	14.55	21	4.0
Holbeck	29,850	585	19.60	33	5.6
Mill Hill	5,303	85	16.03	7	8.2
West	22,196	455	20 · 50	35	7.7
North-West	31,872	505	15.84	25	5.0
Brunswick	24,133	398	16 · 49	27	6.8
New Wortley	18,104	375	20 · 71	18	4.8
Armley and Wortley	37,654	581	15 · 43	26	4.2
Bramley	24,623	383	15.55	13	3.4
Headingley	52,832	885	16.75	35	4.0
City	471,600	8,558	18.15	423	4.9

<sup>\*</sup>Roundhay, Seacroft, Shadwell, and Crossgates. †Including Middleton.

Illegitimate births.—Of the 8,558 nett births registered 8,135 (4,223 males, 3,912 females) or 95'I per cent. were legitimate and 423 (210 males, 213 females) or 4'9 per cent. illegitimate. The ratio of illegitimate to legitimate is the same as last year, namely, I to 19.

YEAR.	Illegitimate births.	Percentage of nett births registered.	Rate per 1,000 estimated population.
1917	576	7.6%	1.31
1918	528	7.1%	I·23
1919	567	7.5%	1.32
1920	631	5.6%	1.41
1921	565	5.6%	I·2I
1922	511	5.5%	1.09
1923	438	5.0%	0.93
1924	423	4.9%	0.30

Reference to the illegitimate death-rate will be found on pages and 124.

Deaths.—The total deaths registered in the City during the year was 6,824, comprising 3,558 males and 3,266 females. After deducting the deaths (435) of non-residents and adding the deaths (358) of residents living outside the City boundary at the time of death one gets a nett total of 6,747, made up of 3,475 males and 3;272 females. The gross death-rate calculated on the above figures for the year was 14.5 and the nett rate 14.3 which compared with the figures 13.0 and 12.7 for the previous year show an increase of 1.5 and 1.6 in the gross and nett rate respectively. This increase represents a loss to the City of 755 lives (or 11.2 per cent.) as compared with the figure for the previous year. The death-rate 14.3 is the highest recorded since 1920 and is a point higher than the average for the previous five years (14.2). The death-rate for England and Wales for the year 1924 was 12.2, an increase of 0.6 on the rate of the previous year, and of 0.3 for the average of

the previous five years. The death-rate last year for Leeds was therefore 2·I in excess of that for the whole country. Compared with the other ten large towns Leeds had the unenviable distinction of being second highest, Bradford with a rate of 14·6 topping the list.

Death-rate in quarters.—An analysis of the deaths in the four quarters of the year show a very high figure namely, 22.4 for the first quarter, a very low figure 9.9 for the third quarter, whilst the remaining two quarters were fairly normal. It was the first quarter which spoilt the whole record for the year otherwise the rate might have been as favourable as that for any previous year. Reasons for the phenomenal rise in the first quarter are discussed in a succeeding paragraph.

Death-rate in Wards.—The wards with the highest death-rates in order of numerical importance were South, West and East. It is in these wards precisely where the density of the population is highest and housing conditions worst. Density of population is an important factor in the causation of death, indeed it has been shown be several of our statisticians that there is a definite relation-ship between density and mortality which can be expressed in actual figures.

Causes of death.—The principal causes of death were in order of numerical importance, heart disease, bronchitis, cancer, pneumonia, phthisis and influenza which together accounted for 53 per cent.

NECTED AND ADMINISTRATION OF THE CONTRACT OF T		I.	II.	III.	IV.	Year.
1917		19.1	17.3	13.6	14.5	16.1
1918		19.7	16.0	14.3	29.8	19.9
1919		25.5	13.1	11.3	15.2	16.2
1920		20.6	13.9	11.2	13.1	14.7
1921		14.5	12.5	11.3	15.8	13.2
1922		17.5	14.6	10.6	12.9	13.0
1923		1.4.7	13.4	10.6	12.4	12.7
1924	• •	22.4	12.0	9.8	12.5	14.3

DEATHS AND DEATH RATE IN WARDS.

Municipal Ward.	Estimated population middle of 1924.	Nett deaths.	Death-rate.
Central	12,703	206	16 · 22
North	43,128	603	13.98
North-East	36,846	566	15.36
New Ward*	9,205	95	10.32
East	36,030	601	16.68
South	13,020	230	17 · 67
East Hunslet†	37,673	543	14 · 41
West Hunslet	36,428	480	13 · 18
Holbeck	29,850	432	14 · 47
Mill Hill	5,303	64	12.07
West	22,196	376	16.94
North-West	31,872	478	15.00
Brunswick	24,133	310	12.85
New Wortley	18,104	245	13.53
Armley and Wortley .	37,654	515	13.68
Bramley	24,623	312	12.67
Headingley	52,832	691	13.08
City	471,600	6,747	<b>14</b> ·31

<sup>\*</sup>Roundhay, Seacroft, Shadwell, and Crossgates. †Including Middleton.

of the total deaths. Taken as a group respiratory diseases contributed to the death-rate more than any other single disease or group of diseases. It is chiefly to this group including influenza that the increased death-rate for the year was due. The last quarter of 1923 was characterised by cold wet weather with a temperature much lower than had been experienced for some years previously. These wintry conditions continued into 1924 and about the second week in February influenza made its appearance in epidemic form. It was of a peculiarly fatal type which attacked persons in the age groups at both ends of the scale of life, particularly the children. The disease in the majority of cases was complicated with bronchitis or pneumonia, particularly so amongst the babies and younger The effect of this was to send the infantile mortality rate up with a bound, so much so that the rate for the third week in February reached the phenomenally high figure of 321. same time the old people were succumbing at an even more rapid rate. An indication of the violence of the onslaught may be got from the rapid rise of the general death-rate from 15.5 in the last week of January, to 38.4 in the first week of March, from which it fell to 35.9 in the second week, and to 26.1 in the third week. From that time forward the disease abated until normal figures were again reached about April. It is interesting to note that the period of maximum intensity as shown by the infantile mortality rate did not coincide with that indicated by the general death-rate, for whereas the former reached its peak in the third week of February the latter did not touch the maximum till the first week of March.

Another feature of the epidemic was the shortness of the interval between the onset of the disease and death. In quite a number of cases a fatal issue ensued within forty-eight hours of the first manifestation of the disease. This made it all the more difficult to do anything of an effective nature to control the malady. A certain number of cases which occurred in overcrowded and poverty stricken homes were removed to Seacroft Hospital, not so much with the idea of preventing the spread of the disease as to give the victims a chance of recovery. Unfortunately most of the cases were removed at a stage too late to save life and the only effect removal had was to enhance the patient's comfort and relieve his relatives of the burden of nursing. My experience in this as in the epidemic of 1918-1919 confirms me in the belief that hospital treatment for influenza especially when complicated with pneumonia

is useless unless the case can be removed in the very early stages before consolidation of the lungs has set in—even then it is of doubtful value.

Organic heart disease continues to take a heavy toll of life. In the majority of instances it accompanies or follows an attack of acute rheumatism. Why the rheumatic infection should select the heart as its object of attack is not clear but that it does so in almost every case where the disease exists in an acute form is well authenticated. The cause of rheumatism itself is doubtful but the consensus of opinion is that it is due to a specific germ which gains access to the body either by way of the alimentary canal or the mucous membranes of the nose and throat. In whatever way it enters once established it gives rise to symptoms chiefly resembling those which accompany other acute infections. Rheumatism should therefore be regarded as an infectious condition especially during the acute stage and persons predisposed to the disease should keep at a safe distance. Climatic conditions are often blamed for causing rheumatism and though they are undoubtedly an exciting factor especially in sub-acute and chronic cases they do not furnish a complete explanation of the disease in its acute form.

The incidence of cancer continues to increase. In 1924, 65 more cases died of the disease than in the previous year. This of itself would be disquieting enough but when one considers that the increase was more marked amongst persons living at the age group 25 to 45 than in the older age groups with which the disease is usually associated 45 to 65 and upwards, one's anxiety for the future is greatly enhanced. In the absence of definite knowledge regarding the causation of the disease it is useless to explain the increase one must be content merely to record the fact. But one lesson it does teach and that is the necessity for more intensive research at all the large centres of medical education in the country in order that the source of the disease may be revealed and effective measures taken to combat it in the early stages. In this the public have a part to play by providing the funds necessary to enable this research to be carried on. After all it is their battle and they must provide the munitions of war.

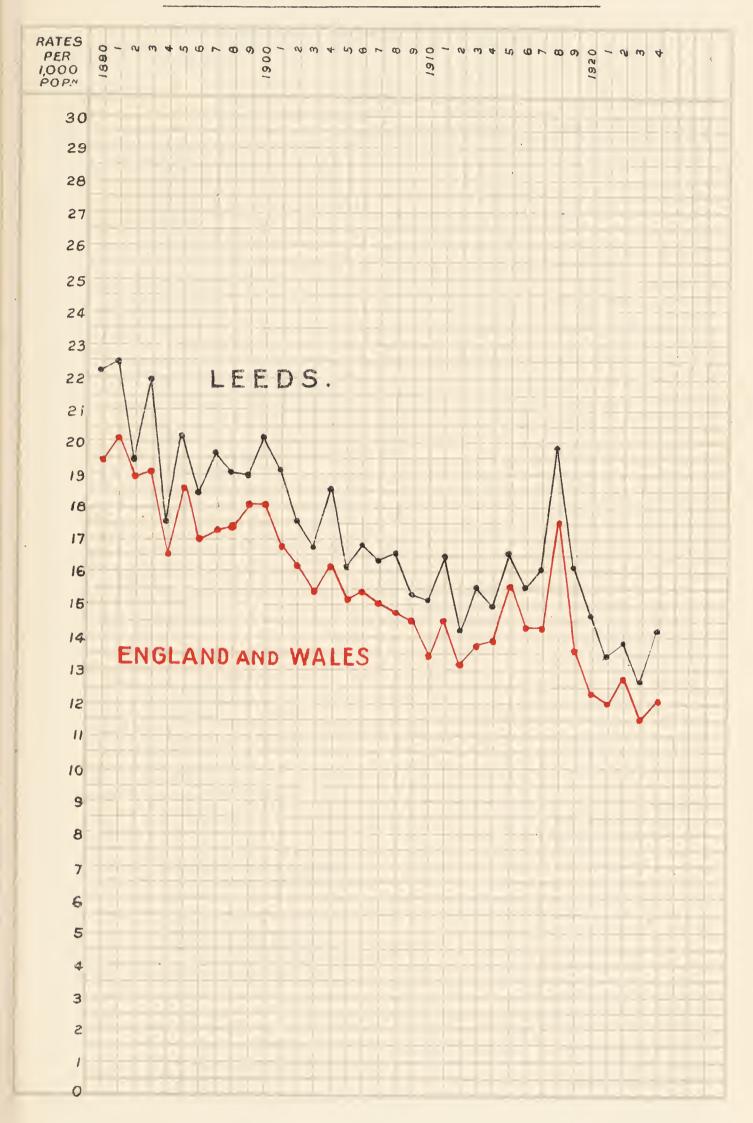
This subject is further dealt with on page 78.

Observations on influenza, pneumonia and phthisis, will be found on pages 74, 75 and 91 respectively.

ANNUAL DEATHS AND DEATH RATE.

Year.	Population.	Nett deaths.	Death-rate LEEDS.	Death-rate England and Wales.
1901	429,383	8,204	19.2	16.9
1902	431,043	7,699	17.6	16.3
1903	432,703	7,263	16.8	15.2
1904	434,363	8,039	18.6	16.3
1905	436,023	7,047	16.2	15.3
1906	437,683	7,350	16.9	15.2
1907	439,343	7,167	16.4	15.1
1908	441,003	7,430	16.6	14.8
1909	442,663	6,806	15.4	14.6
1910	444,323	6,711	15.2	13.2
1911	445,983	7,331	16.5	14.6
1912	447,746	6,396	14.3	13.3
1913	457,295	7,237	15.6	13.8
1914	459,260	6,885	15.0	14.0
1915	459,260	7,609	16.6	15.7
1916	446,349	6,946	15.6	14.4
1917	438,254	7,052	16.1	14.4
1918	427,589	8,529	19.9	17.6
<b>19</b> 19	430,834	6,992	16.2	13.4
1920	448,913	6,591	14.7	12.4
1921	465,500	6,285	13.5	12.1
1922	466,700	6,479	13.9	12.8
1923	469,900	5,986	12.7	11.6
1924	471,600	6,747	14.3	12.5

# DEATH RATE, 1890 - 1924.





# PRINCIPAL CAUSES OF DEATH.

1924	Death	Discoses	No. of deaths in	Increase or decrease	Но	uses.
Small-pox	rate.	Diseases.	1924	compared	Through.	Back-to-back.
0·10         Measles         46         - 4         6         40           0·04         Scarlet Fever         20         - 11         5         15           0·18         Whooping Cough         87         + 55         15         72           0·06         Diphtheria         27         + 7         7         20           0·86         Influenza         404         + 282         134         270           0·02         Erysipelas         10         - 7         4         6           1·09         Phthisis (Pulmonary Tuberculosis) (Pulmonary	0.01		6	+ 5	3	3
0·04         Scarlet Fever         20         - 11         5         15           0·18         Whooping Cough         87         + 55         15         72           0·06         Diphtheria         27         + 7         7         20           0·86         Influenza         404         + 282         134         270           0·02         Erysipelas         10         - 7         4         6           1·09         Phthisis (Pulmonary Tuberculosis) (Pulmonary Tuberculosis (Pulmonary Tuberculosis) (Pulmonary Tuberculosis (Pulmonary Tuberculosis) (Pulmonary Tuberculosis) (Pulmonary Tuberculosis) (Pulmonary Tuberculosis) (Pulmonary Tuberculosis (Pulmonary Tuberculosis (Pulmonary Tube		Small-pox	• •	• •	* *	• •
0·18         Whooping Cough         87         + 55         15         72           0·06         Diphtheria         27         + 7         7         20           0·86         Influenza         404         + 282         134         270           0·02         Erysipelas         10         - 7         4         6           I·09         Phthisis (Pulmonary Tuberculosis)         513         - 2         159         351           0·31         Other Tuberculous Diseases         144         + 22         42         102           1·35         Cancer, malignant disease         639         + 65         240         397           0·06         Rheumatic Fever         26         + 6         10         16           0·15         Meningitis         70         + 5         28         41           0·70         Cerebral Hamorrage         332         + 13         114         218           0·70         Cerebral Hamorrage         332         + 13         114         218           1·59         Organic Heart Disease         748         + 130         240         501           0·44         Arterio-sclerosis         209         - 32         97 </td <td>0.10</td> <td>Measles</td> <td>46</td> <td>- 4</td> <td>6</td> <td>40</td>	0.10	Measles	46	- 4	6	40
0·06         Diphtheria         27         + 7         7         20           0·86         Influenza         404         + 282         134         270           0·02         Erysipelas         10         - 7         4         6           I·09         Phthisis         (Pulmonary Tuberculosis)         513         - 2         159         351           0·31         Other Tuberculous Diseases         144         + 22         42         102           1·35         Cancer, malignant disease         639         + 65         240         397           0·06         Rheumatic Fever         26         + 6         10         16           0·15         Meningitis         70         + 5         28         41           0·70         Cerebral Hæmorrage         332         + 13         114         218           1·59         Organic Heart Disease         748         + 130         240         501           0·44         Arterio-sclerosis         209         - 32         97         111           1·36         Bronchitis         643         + 125         198         445           1·31         Pneumonia (all forms)         619         + 179	0.04	Scarlet Fever	20	- 11	5	15
0.86         Influenza         404         + 282         134         270           0.02         Erysipelas         10         - 7         4         6           1.09         Phthisis         (Pulmonary Tuberculosis)         513         - 2         159         351           0.31         Other Tuberculous Diseases         144         + 22         42         102           1.35         Cancer, malignant disease         639         + 65         240         397           0.06         Rheumatic Fever         26         + 6         10         16           0.15         Meningitis         70         + 5         28         41           0.70         Cerebral Hemorrage         332         + 13         114         218           1.59         Organic Heart Disease         748         + 130         240         501           0.44         Arterio-sclerosis         209         - 32         97         111           1.36         Bronchitis         643         + 125         198         445           1.31         Pneumonia (all forms)         619         + 179         143         473           0.24         Other diseases of respiratory organs	0.18	Whooping Cough	87	+ 55	15	72
0 · 0 2   Erysipelas	0.06	Diphtheria	27	+ 7	7	20
1.09	o·86	Influenza	404	+ 282	134	270
(Pulmonary Tuberculosis)         513         - 2         159         351           0·31         Other Tuberculous Diseases         144         + 22         42         102           1·35         Cancer, malignant disease         639         + 65         240         397           0·06         Rheumatic Fever          26         + 6         10         16           0·15         Meningitis          70         + 5         28         41           0·70         Cerebral Hæmorrage          332         + 13         114         218           1·59         Organic Heart Disease          748         + 130         240         501           0·44         Arterio-sclerosis          209         - 32         97         111           1·36         Bronchitis          643         + 125         198         445           1·31         Pneumonia (all forms)          619         + 179         143         473           0·24         Other diseases of respiratory organs          111         + 12         48         63           0·07         Appendicitis and Typhlitis         32	0.02	Erysipelas	10	- 7	4	6
1 · 35	1.09		513	- 2	159	351
0.06         Rheumatic Fever         26         + 6         10         16           0.15         Meningitis          70         + 5         28         41           0.70         Cerebral Hæmorrage          332         + 13         114         218           1.59         Organic Heart Disease          748         + 130         240         501           0.44         Arterio-sclerosis          209         - 32         97         111           1.36         Bronchitis          643         + 125         198         445           1.31         Pneumonia (all forms)          619         + 179         143         473           0.24         Other diseases of respiratory organs          111         + 12         48         63           0.26         Diarrhœa and Enteritis          122         - 20         23         99           0.07         Appendicitis and Typhlitis         32         + 5         11         21           0.04         Cirrhosis of Liver          17         - 13         8         9           0.44         Nephritis and Bright's Disease <td>0.31</td> <td>Other Tuberculous Diseases</td> <td>144</td> <td>+ 22</td> <td>42</td> <td>102</td>	0.31	Other Tuberculous Diseases	144	+ 22	42	102
0·15       Meningitis       70       + 5       28       41         0·70       Cerebral Hæmorrage       332       + 13       114       218         1·59       Organic Heart Disease       748       + 130       240       501         0·44       Arterio-sclerosis       209       - 32       97       111         1·36       Bronchitis       643       + 125       198       445         1·31       Pneumonia (all forms)       619       + 179       143       473         0·24       Other diseases of respiratory organs       111       + 12       48       63         0·24       Other diseases of respiratory organs       111       + 12       48       63         0·26       Diarrhœa and Enteritis       122       - 20       23       99         0·07       Appendicitis and Typhlitis       32       + 5       11       21         0·04       Cirrhosis of Liver       17       - 13       8       9         0·44       Nephritis and Bright's Disease       209       + 3       71       137         0·02       Puerperal Fever       9       - 1       3       6         0·05       Other accidents and disea	1.35	Cancer, malignant disease	639	+ 65	240	397
0·70         Cerebral Hæmorrage          332         + 13         114         218           1·59         Organic Heart Disease          748         + 130         240         501           0·44         Arterio-sclerosis          209         - 32         97         111           1·36         Bronchitis           643         + 125         198         445           1·31         Pneumonia (all forms)          619         + 179         143         473           0·24         Other diseases of respiratory organs          111         + 12         48         63           0·26         Diarrhœa and Enteritis          122         - 20         23         99           0·07         Appendicitis and Typhlitis         32         + 5         11         21           0·04         Cirrhosis of Liver          17         - 13         8         9           0·44         Nephritis and Bright's Disease          209         + 3         71         137           0·05         Other accidents and diseases of Pregnancy and Parturition          24         - 11         6	0.06	Rheumatic Fever	26	+ 6	10	16
1.59       Organic Heart Disease        748       + 130       240       501         0.44       Arterio-sclerosis        209       - 32       97       111         1.36       Bronchitis         643       + 125       198       445         1.31       Pneumonia (all forms)        619       + 179       143       473         0.24       Other diseases of respiratory organs         111       + 12       48       63         0.26       Diarrhœa and Enteritis        122       - 20       23       99         0.07       Appendicitis and Typhlitis       32       + 5       11       21         0.04       Cirrhosis of Liver        17       - 13       8       9         0.44       Nephritis and Bright's Disease        209       + 3       71       137         0.02       Puerperal Fever        9       - 1       3       6         0.57       Congenital Debility and Malformation, including Premature Birth       268       - 16       74       194         0.39       Violent Deaths, excluding Suicide        41	0.12	Meningitis	70	+ 5	28	41
0·44       Arterio-sclerosis        209       - 32       97       III         I·36       Bronchitis        643       + 125       198       445         I·31       Pneumonia (all forms)        619       + 179       I43       473         0·24       Other diseases of respiratory organs        III       + 12       48       63         0·26       Diarrhœa and Enteritis        I22       - 20       23       99         0·07       Appendicitis and Typhlitis       32       + 5       II       21         0·04       Cirrhosis of Liver        17       - 13       8       9         0·44       Nephritis and Bright's Disease        209       + 3       71       137         0·02       Puerperal Fever        9       - 1       3       6         0·05       Other accidents and diseases of Pregnancy and Parturition       24       - 11       6       18         0·57       Congenital Debility and Malformation, including Premature Birth       268       - 16       74       194         0·39       Violent Deaths, excluding Suicide        41       - 3       <	0.70	Cerebral Hæmorrage	332	+ 13	114	218
I·36       Bronchitis	1.59	Organic Heart Disease	748	+ 130	240	501
1·31       Pneumonia (all forms)       619       + 179       143       473         0·24       Other diseases of respiratory organs       111       + 12       48       63         0·26       Diarrhœa and Enteritis       122       - 20       23       99         0·07       Appendicitis and Typhlitis       32       + 5       11       21         0·04       Cirrhosis of Liver       17       - 13       8       9         0·44       Nephritis and Bright's Disease       209       + 3       71       137         0·02       Puerperal Fever       9       - 1       3       6         0·05       Other accidents and diseases of Pregnancy and Parturition       24       - 11       6       18         0·57       Congenital Debility and Malformation, including Premature Birth       268       - 16       74       194         0·39       Violent Deaths, excluding Suicide       183       + 2       60       119         0·09       Suicide       13       + 2       60       119	0.44	Arterio-sclerosis	209	- 32	97	111
0·24       Other diseases of respiratory organs	1.36	Bronchitis	643	+ 125	198	445
organs         111       + 12       48       63         o·26       Diarrhœa and Enteritis        122       - 20       23       99         o·07       Appendicitis and Typhlitis       32       + 5       11       21         o·04       Cirrhosis of Liver        17       - 13       8       9         o·44       Nephritis and Bright's Disease        209       + 3       71       137         o·02       Puerperal Fever        9       - 1       3       6         o·05       Other accidents and diseases of Pregnancy and Parturition       24       - 11       6       18         o·57       Congenital Debility and Malformation, including Premature Birth       268       - 16       74       194         o·39       Violent Deaths, excluding Suicide        183       + 2       60       119         o·09       Suicide        41       - 3       16       25	1.31	Pneumonia (all forms)	619	+ 179	143	473
0.07         Appendicitis and Typhlitis         32         + 5         11         21           0.04         Cirrhosis of Liver          17         - 13         8         9           0.04         Nephritis and Bright's Disease          209         + 3         71         137           0.02         Puerperal Fever          9         - 1         3         6           0.05         Other accidents and diseases of Pregnancy and Parturition         24         - 11         6         18           0.57         Congenital Debility and Malformation, including Premature Birth         268         - 16         74         194           0.39         Violent Deaths, excluding Suicide          183         + 2         60         119           0.09         Suicide           41         - 3         16         25	0.24		III	+ 12	48	63
0.04         Cirrhosis of Liver         17         - 13         8         9           0.44         Nephritis and Bright's Disease         209         + 3         71         137           0.02         Puerperal Fever         9         - 1         3         6           0.05         Other accidents and diseases of Pregnancy and Parturition         24         - 11         6         18           0.57         Congenital Debility and Malformation, including Premature Birth         268         - 16         74         194           0.39         Violent Deaths, excluding Suicide         183         + 2         60         119           0.09         Suicide	0.26	Diarrhœa and Enteritis	122	- 20	23	99
0.44       Nephritis and Bright's Disease       209       + 3       71       137         0.02       Puerperal Fever       9       - 1       3       6         0.05       Other accidents and diseases of Pregnancy and Parturition       24       - 11       6       18         0.57       Congenital Debility and Malformation, including Premature Birth       268       - 16       74       194         0.39       Violent Deaths, excluding Suicide       183       + 2       60       119         0.09       Suicide	0.07	Appendicitis and Typhlitis	32	+ 5	II	21
Disease        209       + 3       71       137         0.02       Puerperal Fever        9       - 1       3       6         0.05       Other accidents and diseases of Pregnancy and Parturition       24       - 11       6       18         0.57       Congenital Debility and Malformation, including Premature Birth       268       - 16       74       194         0.39       Violent Deaths, excluding Suicide        183       + 2       60       119         0.09       Suicide         41       - 3       16       25	0.04	Cirrhosis of Liver	17	- r3	8	9
0.05       Other accidents and diseases of Pregnancy and Parturition	0.44		209	+ 3	71	137
of Pregnancy and Parturition	0.02	Puerperal Fever	9	- I	3	6
Malformation, including Premature Birth	0.05	of Pregnancy and Partu-	24	- II	6	18
Suicide 183 + 2 60 119  O · 0 9 Suicide 41 - 3 16 25	0.57	Malformation, including	268	- 16	74	194
	0.39	Violent Deaths, excluding Suicide	183	+ 2	60	119
	0.09		41	- 3	16	25
2 50 Other Defined Diseases 1,177 - 38 452 725	2.50	Other Defined Diseases	1,177	- 38	452	725
O·O2 Diseases ill-defined or un-known II + 3 6 5	0.02	1	II	+ 3	6	5
14·31 Totals 6,747 + 761 2,223 4,502	14.31	Totals	6,747	+ 761	2,223	4,502

Of the 6,747 deaths, 22 had no home.

Housing and death.—It is interesting to compare the number of deaths which took place in back-to-back houses with those in There are 77,790 back-to-back houses in the through houses. city of which roughly one half are of the old unsatisfactory type. I have not been able, however, to distinguish between the two types of houses in classifying the deaths so that the figures must be taken as applying generally to all back-to-back houses, though it must be recognised that, as far as healthiness is concerned, there is not much difference between a modern type of back-to-back and The total number of deaths from all causes that a good through. occurred during the year was 6,477, of which 4,502 (or 66.7 per cent.) took place in back-to-back houses, 2,223 (or 32.9 per cent.) in throughs, whilst 22 (or 0.3 per cent.) had no fixed domicile, roughly speaking it may therefore be said that two thirds of the deaths took place in back-to-back houses.

Deaths in age groups.—In the table on page 23 the deaths have been analysed in the various age groups. A study of the table will show that the age group with the highest mortality is that over sixty-five years, whilst that of the lowest is between five and fifteen years. Taking the two periods of life o-15 and 45-65 one finds that the deaths in the latter period exceeds those in the former by only 3·4 per cent. whilst 38·3 per cent. of the total deaths occurred between the ages of 25 and 65, that is to say at the period when men and women reach their maximum efficiency and are most useful to the community.

It is interesting to compare the percentages of deaths in the age groups for 1924 with the average of the previous ten years. A glance at the appended table in which the figures are set out in detail will show that in the groups o-1, 1-2, 2-5, 5-15, 15-25 and 25-45 there has been a steady decline, more marked in the earlier Beyond the age group 25-45, that is than in the later groups. 45-65 and 65 upwards there has been a marked increase—in the oldest age group as much as 5.2 per cent. The significance of this is that the burden of death has been shifted from the younger section of the community to the older, or in other words that the expectation of life up to 45 years has been increased. relationship between the figures at the two ends of the scale may be taken as evidence of the success which has attended the various measures adopted for the amelioration of disease and the betterment of the living conditions of the community.

DEATHS IN AGE GROUPS (NETT), 1914-24.

Together with the percentage of the total deaths, represented by each group (in italics).

1		The state of the s		1	- 76	1		1		
1	Year.	Under 1	1-2	2–5	5–15	15–25	25-45	45–65	65+	Total.
	1914	1,324	469	358	269	276	923	1,605	1,661	6,885
THE R. P. LEWIS CO., LANSING, MICH.	1017	19.2%	6.8%	5.2%	3.9%	4.0%	13.4%	23.3%	24.1%	0,000
	1915	1,253	439	389	260	318	965	1,850	2,135	7,609
Control of the last	1010	16.5%	5.8%	5.1%	3.4%	4.2%	12.7%	24.3%	28.0%	1,003
-	1916	1,216	391	285	240	287	885	1,683	1,959	6,946
	1910	17.5%	5.6%	4.1%	3.5%	4.1%	12.7%	24.2%	28·2%	0,940
	1917	1,023	400	422	331	302	835	1,734	2,005	7.059
	1911	14.5%	5.7%	6.0%	4.7%	4.3%	11.8%	24.6%	28 · 4%	7,052
	1918	984	474	743	514	579	1,214	2,007	2,014	8,529
	1310	II·5%	5.6%	8.7%	6.0%	6.8%	14.2%	23.5%	23.6%	0,029
	1919	899	239	298	299	344	957	1,780	2,176	6,992
	1010	12.9%	3.3%	4.3%	4.3%	4.9%	13.7%	25.4%	31.2%	0,332
	1920	1,232				1		1,572		6,591
	1020	18.7%		1				23.9%	27.8%	0,001
	1921	997	278	130	202	297	765	1,562	2,054	6,285
	1321	15.9%	4.4%	2.1%	3.2%	4.7%	12.2%	24.9%	32.7%	0,200
	1922	935	283	211	198	282	766	1,661	2,143	6,479
	1000	14.4%	4.4%	3.3%	3.1%	4.4%	11.8%	25.6%	33.1%	1
	1923	773	189	153	166	277	751	1,620	2,057	5 986
_		12.9%	3.2%	2.6%	2.8%	4.6%	12.5%	27.1%	34.4%	,,,,,,
	1924	92I 13·7%	270	202	173	275	786	1,804	2,316	6,747
	XOM F	13.7%	4.0%	3.0%	2.6%	4.1%	11.6%	26.7% 3	34.3%	O,171
							A			

Comparison of Percentages of Deaths in the various age groups of 1924 as compared with the previous decennium.

Period.	- I	I-2	2-5	5-15	15-25	25-45	45-65	65+
1914-1923 Year 1924 Decrease - Increase +	15·4 13·7 -1·7	4·9 4·0 -0·9	4·6 3·0 -1·6	3·9 2·6 -I·3	4·6 4·1 -0·5	12·8 11·6 -1·2	24·7 26·7 	29·I 34·3 

To carry the comparison even further back, that is to the decennium 1894-1903, gives results which are more striking still. Take, for example, the age group o-1, the percentage of deaths in that group in the decennium 1894-1903 was 28.4 which is 14.7 per cent. higher than the 1924 figure. Similarly the percentage of deaths in the age group 5-15 for the same decennium was 4.4 or 1.8 in excess of the 1924 figure. On the other hand, the percentage of deaths in the oldest age group, that is over 65, for the same decennium, was 16.5 as compared with 34.3 for 1924—an increase in 1924 of not less than 17.8 per cent. These are arresting facts which it is well that the public should know as it proves beyond doubt that money expended on health gives a better return than many people are disposed to believe.

Infant mortality.—The number of deaths of children under one year numbered 921 (or 13.7 per cent.) of the total deaths. The infantile mortality rate corresponding was 108 per thousand births. This subject is dealt with in detail on page 116.

Cremation.—There are signs that the people are beginning to appreciate the advantages of the disposal of the dead by incineration. Last year the number cremated at the Lawnswood Crematorium was 24, the highest number of Leeds subjects disposed of in this manner since the inauguration of the Crematorium in 1905. But 24 is a mere fraction of the total number of deaths registered during the period and only shows how far we have still to go before the point is reached when disposal by burning will entirely supplant earth burial. Cremation, besides being the most rapid, the most effective and the most reverent is also the cheapest method of sepulture. Why then should there be so much hesitation on the part particularly of the more enlightened section of the community to adopt it? For a large city like Leeds or for that matter any other city there is no other alternative method which so completely satisfies the laws of Public Health.

The following is a list showing the number of cremations of Leeds people which have taken place at the Leeds Crematorium, Lawnswood, during the last twenty years.

CREMATIONS IN LEEDS.

CREMATIONS IN LEEDS.						
	Year			No. of Leeds people cremated.	Nett total deaths in City.	Percentage of cremations on nett deaths (Leeds people cremated).
1905	• •		• •	7	7,047	0.10
1906				IO	7,350	0.14
1907				12	7,167	0.17
1908			• •	16	7,430	0.22
1909				9	6,806	0.13
1910		• •		5	6,711	0.07
1911				7	7,331	0.10
1912				14	6,396	0.22
1913			• •	7	7,237	0.10
1914	• •			18	6,885	0.26
1915				13	7,609	0.17
1916			• •	9	6,946	0.13
1917	• •			10	7,052	0.14
1918				23	8,529	0.27
1919			• •	18	6,992	0.26
1920			• •	13	6,591	0.20
1921			• •	9	6,285	0.14
1922			• •	17	6,479	0.26
1923	• •			II	5,986	0.18
1924	• •		• •	24	6,747	0.36
	Total		• •	252	139,576	0.18

Hospital Accommodation.—Hospital provision in this city is inadequate to meet the demands of all sections of the community. It is not that the accommodation is insufficient but that it is badly distributed. At all the voluntary institutions there are long lists of patients awaiting admission whilst the accommodation in the Poor Law Infirmaries is only partially occupied. Expressed in another way this means that the pauper element of the population is provided for to an extent beyond its requirements, whilst the needs of the non-pauper class, where the family income falls below a figure high enough to permit of treatment in a nursing home or private institution, are only partially met.

The total accommodation in all the voluntary institutions, including the Leeds General Infirmary, Maternity Hospital, Women and Children's Hospital and the Public Dispensary is about eight hundred or 1.7 per thousand of the population. It is generally reckoned that the number of hospital beds required for the treatment of disease of a non-infectious character should not be less than three per thousand of the population, whereas as a matter of fact, taking the population of Leeds and the surrounding districts served by the Leeds Hospitals as roughly 800,000 it is just I per thousand of the population.

It is perfectly obvious even to those most anxious to retain the voluntary principle of hospital provision that there are not sufficient funds to provide the necessary extensions to the existing institutions, even if such extensions were desirable in face of the fact that the Poor Law Hospitals are partially empty. Some of the latter are buildings of comparatively modern structure, well situated and well equipped and would make ideal hospitals for the treatment of the sick of all classes of the community including those who are able to pay a reasonable fee for their treatment. The way out of the difficulty is therefore clear. It is to open the doors of the Poor Law Infirmaries to the whole community. necessitate an alteration of the existing law but it would be much easier to do that than to build new hospitals or extend existing ones. How, it may be asked, would a system of voluntary and rate aided institutions be managed? The best way would probably be by the formation of a Hospital Board which, whilst it would not interfere with the autonomy of the component institutions, would act as a co-ordinating link between them and so prevent overlapping and duplication of effort. Certainly things ought not to continue The present system altogether fails to provide the as they are. service which the health of the community demands.

# ABSTRACT FROM REGISTERS.

							2 /
Total.	247 (501)	<b>2,071</b> (2,595)	<b>2,318</b> (3,096)	1,951 (2,774)	<b>115</b> (75)	<b>5.6</b> (2.6)	252 (247)
For Quarantine (Cottages).	•	(9)	<b>88</b> (9)	83	•	:	:
Other Discases.	12 (12)	<b>299</b> (241)	<b>311</b> (253)	<b>268</b> (218)	<b>25</b> (23)	<b>8.5</b> (9.5)	18 (I2)
Inf. Diair.	•	<b>45</b> (3)	<b>45</b> (3)	<b>26</b> (3)	18	40.9	<del></del>
Pneu- monia.	•	(II)	56 (11)	36	<b>18</b> (5)	<b>33·3</b> (45·5)	67
Enteric Fever.	: (2)	<b>7</b> (7)	<b>7</b> (9)	9		14.3	:
Typhus,	•	•	•	•	•	•	:
Liph- theria.	36 (47)	<b>274</b> (352)	<b>310</b> (399)	<b>245</b> (345)	25 (18)	<b>9.3</b> (4.9)	<b>40</b> (36)
Scarlet Fever.	<b>199</b> (433)	<b>1,197</b> (1,922)	1 <b>,396</b> (2,355)	<b>1,186</b> (2,131)	20 (25)	1.7 (I.1)	<b>196</b> (199)
Measles.	: (1)	<b>10</b> 2 (53)	<b>102</b> (60)	93 (56)	<b>8</b> (4)	<b>6.7</b> (0.6)	<del></del>
Small Pox.	•	∞ ∞	∞	∞	•	•	•
YEAR 1924.	Patients remaining in Hospitals and Isolation Cottages, on Saturday, December 29th, 1923	Admitted from December 30th, 1923, to January 3rd, 1925	Total treated	Discharged	Died	Mortality per cent	Patients remaining in Hospitals and Isolation Cottages, on Saturday, January 3rd, 1925

Note.—Bracketed figures are the corresponding figures of the previous year.

# Comparative Statistics of the larger English Cities, 1924.

		RATE PER 1,000 POPULATION.						Death Rate per 1,000 Births.	
		Population.	Birth Rate.	Death Rate.	Phthisis, Death Rate.	Other Tuber- culosis. Rate.	Deaths under One Year.	Diarr- hœa and Enter- itis under 2.	
London		4,576,505	18.6	12.2	0.98	0.18	69	8.7	
Birmingham		944,386	19.2	11.6	0.97	0.13	83	15.1	
Liverpool		836,396	24.6	13.6	1.3	0.26	103	15.3	
Manchester*		755,119	19.2	14.0	1.18	0.30	100	11.1	
Sheffield		525,000	18.5	11.6	0.80	0.30	90	9.1	
Leeds		471,600	18 · 1	14.3	1.09	0.31	108	12.0	
Bristol		386,200	18.7	12.2	0.94	0.19	69	5.4	
Hull		296,800	22.5	13.2	I.O	0.3	86	11.4	
Bradford	• •	290,200	16.4	14.6	0.41	0.20	96	7	
Newcastle		285,900	22 · 2	13.2	1.12	0.35	100	10.1	
Nottingham		270,300	19.3	13.1	0.97	0.2	84	10.3	

<sup>\*</sup>Fifty-three weeks year.

## SANITARY CIRCUMSTANCES.

Drainage and Sewerage.—As in previous years, representations have been made to the City Engineer's Department for sewer extensions to enable outlying property to be drained. In 1924 branch sewers of a total length of 1,920 yards have been completed, and this has allowed of the conversion of 13 privies, the abolition of two cesspools, the provision of six new water closets and the connection of the drains of 25 houses to sewers.

Sewage Disposal.—The work in connection with the new outfall works at Knostrop has been advanced a stage further during the year. As mentioned in my previous report, the main sewer running through the Osmondthorpe estate has been connected up to the new works, and in the early part of the year the cesspools in connection with the house property on the estate numbering 31 were abolished and the house drains joined up to the sewer. This much needed improvement was welcomed by the property owners, who have always had a grievance that they alone in that part of the city were compelled to put up with an old-fashioned system of drainage. The improvement effected by the abolition of the cesspools should add not only to the health of the residents in the district but also improve its amenities.

A new high-level sewer is at present under construction to take the sewage from the part of the city north of the river. It is eight feet in diameter at its maximum size and when completed will have a carrying capacity of II5,000,000 gallons dry weather flow in twenty-four hours.

Scavenging and Cleansing.—The amount of household refuse including nightsoil collected by the Cleansing Department during the year was 180,654 tons, of which 78,938 tons were dealt with at the destructors, 101,618 tons at tips and for agricultural purposes and 98 tons sold as manure to farmers.

Complaints continue to be received with regard to nuisances arising in connection with the refuse tips in various parts of the city. The burning of paper and other household refuse at these tips is a constant source of annoyance to householders in the vicinity, and on occasion when a tip goes on fire, the nuisance becomes almost unbearable. It would be of immense benefit to the comfort and health of the people if the disposal of household refuse by tipping could be abolished, and the more sanitary method of incineration in modern destructors substituted. At the best, tips are unsightly;

they harbour rats and other vermin, and in hot weather are apt to become very offensive. The loose paper, some of it not so clean as it might be, is exceptionally objectionable because the wind carries it into gardens and yards of adjacent houses. There are now in the city 30 of these tips. The cost involved in abolishing these and carting the rubbish to conveniently placed destructors would be considerable but the improvement to the health and general appearance of the city which would accrue would be well worth this additional expense.

Ashpits and Ashbins.—The policy of the Department of requiring one bin for each house was endorsed by the Ministry of Health after an enquiry held by one of the Ministry's inspectors into a case where an owner had appealed against a notice served on him by the Department to provide metal ashbins for his property in the ratio above mentioned. The enquiry had the twofold effect of establishing the legality of the Department's requirements and impressing upon owners the advantages of the metal ashbin over all other types of so-called sanitary receptacle.

The total number of metal ashbins provided in response to notices from the Department during the year was 3,836. The sunken ashpit is admittedly a most dangerous and insanitary type of refuse receptacle. It cannot be properly cleansed and not being always watertight the refuse inevitably becomes offensive. There are 2,202 ashpits of this type in the city. Every effort is made to induce property owners to discard the sunken ashpit and substitute the more sanitary metal ashbin, but the Public Health Acts and the Leeds Corporation (Consolidation) Act, 1905, do not empower the Department to deal with a sunken ashpit except as a nuisance or when it becomes dilapidated. The number of sunken ashpits abolished during the year was 221, an increase of 40 over the figure for the previous year.

Closet Accommodation.—One of the most satisfactory features of the year's work has been the increased number of conversions of trough closets into modern pedestal water closets. During 1923 the conversions numbered 68 whereas in the year under review 475 were dealt with. The amount of compensation paid was £2,692 4s. compared with £192 5s. 9d. for the preceding year. The increase is explained by the rise in the number of conversions consequent upon the augmentation of the Corporation subsidy from 50 per cent. to 75 per cent. as well as to the enhanced cost to the Committee due to this augmentation.

In addition to the trough closets 86 privies were dealt with, 78 privies being converted into pedestal water closets and the remainder abolished. It should also be noted that 35 cesspools were abolished and 75 houses properly drained and connected to the sewers.

The general position with regard to the various types of sanitary conveniences in the City at December 31st, 1924, was as follows:—Privies, 472; Pail Closets, 101; Trough Closets, 8,781; and Water Closets approximately 99,000.

Table shewing Numbers of Trough Closets, Privies and Pail Closets in the City during the last Twenty Years.

		The same of the sa	1
Year.	Trough Closets.	Privies.	Pail Closets.
1905	10,507	1,669	231
1906	10,461	1,193	229
1907	10,424	963	228
1908	10,410	875	202
1909	10,120	851	198
1910	10,047	821	165
1911	9,963	785	164
*1912	9,934	1,284	221
1913	9,790	1,269	217
1914	9,760	1,211	207
1915	9,738	1,047	188
1916	9,725	1,026	185
1917	9,723	1,023	169
1918	9,693	1,022	166
1919	9,655	1,014	166
†1920	9,594	1,051	155
1921	9,521	900	128
1922	9,324	651	III
1923	9,256	558	102
1924	8,781	472	IOI

<sup>\*</sup>Roundhay, Seacroft Shadwell and Crossgates were brought within the city boundary in this year. In this area there were 502 privies and 61 pail closets.

<sup>†</sup>Middleton was brought within the city boundary in this year. In this area there were 148 privies.

Public Conveniences.—In my last report I mentioned that proposals had been set afoot for the construction or reconstruction of 16 public conveniences in the city. Since that date an Enquiry into the proposals has been held by the Ministry of Health as a result of which authority was given for the erection or re-erection of 13 conveniences on the following sites:—New: \*(I) junction of Woodhouse Lane and Cookridge Street; \*(2) junction of Roundhay Road and North Street; \*(3) Killingbeck tram terminus; (4) in Cherry Row, Newtown (on open space); (5) York Road Circus; (6) junction of Low Road and Pepper Road; (7) junction of Whitehall Road and Springwell Road; and \*(8) Lawnswood tram terminus; Existing: (1) junction of Jack Lane and Nineveh Road; (2) Hunslet Lake, Moor Road, Hunslet; \*(3) Holbeck Moor; (4) Cross Flatts Park; and (5) East Street, near Marsh Lane. Those marked in the list with an asterisk include provision for females as well as for males.

The total number of urinal stalls in the new conveniences will be 75, water closets for males 3, and water closets for females, 15. Power to borrow the necessary money for the construction of these conveniences has since been obtained and it is hoped by the end of another year some, if not all of them, will be completed.

### SANITARY ADMINISTRATION.

**Staff.**—In the beginning of the year Dr. H. C. Jennings, Assistant Medical Officer of Health and Chief Sanitary Inspector, resigned on his appointment to the position of County Medical Officer for the Holland Division of the Lincolnshire County and Dr. A. Stuart Hebblethwaite was appointed in his stead.

On March 20th George F. Marshall was appointed to the position of Divisional Sanitary Inspector vacated by Matthew Carter. Mr. Carter retired after a long and honourable record extending over a period of 35 years during which the sanitary conditions of the city underwent remarkable improvement, much of which was due to his wide and intimate knowledge of the sanitary circumstances of the area of the city in which he worked and his disinterested endeavour to advance the "Sanitary ideal" which animated him throughout the whole of his service with the Corporation.

The male inspectorial staff at the end of the year comprised:—

- I Chief Sanitary Inspector (who is also Assistant Medical Officer of Health).
- 2 Divisional Inspectors.
- 18 District Inspectors.
  - I Executive Rats Officer.
  - I Smoke Inspector.
  - I Assistant Smoke Inspector.
  - I Housing Inspector.
- 2 Workshops Inspectors.
- I Inspector of Common Lodging Houses, Canal Boats, etc.
- I Probationer Inspector.

Sanitary Inspection of District.—The high standard of general inspectorial work reached in 1923 has been fully maintained and much has been done to remedy housing and drainage defects, abolish nuisances and render insanitary property fit for human habitation.

The administration of the Rent and Mortgage Interest (Restrictions) Acts, 1920 and 1923, as far as these affect the Sanitary Authority, has been continued. Since the commencement of the operation of these Acts in July, 1920, up to the end of December, 1924, 931 applications for certificates have been received and 866 certificates and 18 reports issued. During the year under review 121 applications were received and 119 certificates and four reports issued.

Notices.—The number of preliminary notices served during the year for the abatement of nuisances and the repair of insanitary property was 9,514 and the number of statutory notices 3,070. Of the latter 2,689 were effective, and 381 were outstanding at the end of the year.

Legal Proceedings.—In two cases legal proceedings were instituted for failure to carry out the requirements of notices served under the Public Health Acts, whilst in several others compliance with the terms of the notices served by the department was induced by threats of legal proceedings.

Complete details of the sanitary work are given on pages 34 and 35.

Underground Sleeping Rooms.—The new regulations which came into force in 1923 and which I mentioned in my last annual report have resulted in considerable improvements being undertaken to certain properties in the city with basements of which part is used as a sleeping room.

## SANITARY INSPECTION OF DISTRICTS.

	NORTH.	SOUTH.	City Total.
Houses completely examined for—			
Infectious disease	809	831	1,640
Alleged nuisances	117	141	258
House to house work	943	1,200	2,143
Premises examined only as to—			
Occupants	47	69	116
Alleged nuisances	1,065	2,052	3,117
Drainage	178	324	502
Nuisances found in above or other houses—			
Dirty houses	158	98	256
Overcrowded houses	100	91	19 <b>1</b>
Dampness or dilapidation	1,457	2,322	3,779
Drain or closet defects	1,225	2,081	3,306
Defective ashpits or bins	2,197	3,086	5,283
Other nuisances	2,829	2,938	5,767
Outside nuisances found (gullies, etc.)	902	1,348	2,250
Total nuisances found	8,868	11,964	20,832
Additional visits paid to houses for—		The second secon	
Infectious disease	825	1,219	2,044
Non-abated nuisances	5,474	8,787	14,261
To inspect work in progress	2,009	2,343	4,352
Other causes	5,337	4,258	9,595
Drains tested	2,026	2,472	4,498
Drains found defective	305	437	742

## SANITARY WORKS CARRIED OUT DURING 1924.

NATURE OF WORK.	NORTH.	SOUTH.	City Total.
Houses cleansed	119	88	207
Overcrowded houses dealt with	24	28	52
Defective spouting, &c., repaired	1,616	2,323	3,939
Urinals cleansed or repaired	24	2.1	48
Sunken ashpits abolished	115	106	221
Privies or pail closets abolished or converted into water closets	39	48	87
Waterclosets erected	9	18	27
Houses provided with suitable ashes accommodation	2,003	2,898	4,901
Ashbins provided	1,723	2,113	3,836
Trough closets converted into W.C.'s	229	246	475
Closets cleansed (limewashed), etc.	182	112	294
Drainage works carried out	1348	1,637	2,985
Cesspools filled up	2	33	35
Public or private wells abolished			
Houses connected to water mains	10	II	2 I
Trough and water closets repaired	665	1,191	1,856
Other house nuisances remedied	1,662	1,672	3,334
Total houses for which above work was done	8,891	11,657	20,548
Offensive accumulations removed and stopped gullies cleansed  Pollution of streams remedied	478	1,115	I,593 
Other non-domestic nuisances removed	60	36	96
Total nuisances abated	8,585	11,586	20,171

Common Lodging Houses.—Whilst the accommodation provided for men in the common lodging houses is ample there is an urgent need for more and better accommodation for women. The practice adopted in other towns of having mixed common lodging houses is open to objection on various grounds and should not receive favour in this city.

Several of the men's common lodging-houses are constructed on the cubicle system. Whilst admittedly this gives greater privacy, the ventilation suffers as there is no circulation of air at the floor level, and an odour of stale urine pervades the cubicles. This defect has been met to some extent by leaving a space of nine inches under the partition and between it and the floor, thus securing more perfect circulation of air.

As regards sickness in common lodging-houses, I should like to draw attention to the fact that on the 16th July one of the inmates of a common lodging-house was found to be suffering from smallpox. By prompt removal of the patient to hospital, vaccination of the inmates and adequate disinfection of persons, clothing and premises, the spread of the infection was arrested. Only one other case occurred.

A new common lodging-house for men at 79, Richmond Road, The Bank, was opened during the year, and duly registered by the Health Committee on the 18th December.

At the end of the year there were in the city 30 registered common lodging-houses, 28 of these being for men and two for women, the total number of beds being respectively 1,741 for males and 99 for females and children.

In addition to the common lodging-houses enumerated above, there are four unregistered lodging-houses, three for men and one for women, which are under the control of the Salvation Army and the Church Army. One of these is a new lodging-house which was opened in November by the Salvation Army and provides accommodation for 65 lodgers. The other three houses possess altogether 387 beds for men and 21 for women. The houses continue to be conducted satisfactorily though some of them as regards lighting and ventilation leave much to be desired.

Number registered— Men's 28 Beds available 1,741 Women's 2 ,, ,, 99 Routine visits paid Visits as to drain tests and abatements Visits to smallpox contacts Visits for infectious disease Drains tested 7, in 2 houses Defects found, none Re-testings on completion of work 2	• •	86 8 33 1	I
Nuisances found and abated:—			
		FOUND.	ABATED.
Dirty closets	• •	6	6
Dirty rooms	• •	• •	
Dirty bedding	• •	4	4
Defective or stopped drains		4	4
Defective roofs or eaves spouts		9	9
Other nuisances	• •	52	52
Total	• •	75	75

# Houses Let in Lodgings.

Registered during 1922 Removed from Regis On register at end of Houses let in lodgin registered Houses examined (ne Drains tested 176, Drains re-tested 25 Visits for abatement of infectious of additional	ter f 1924 gs visited w lodgings in 161 hou f, in 11 hou of nuisance disease (9 c	though  ises uses s ases)	not 821 36	HOUSES. 77 641 62	ROOMS 286 2,253 175
Nuisances— Dirty or bad bed Dirty rooms Overcrowding Dirty closets Other nuisances Structural defects	• • • • • • • • • • • • • • • • • • • •	• •	• •		ABATED.  144 42 30 29 312 271

University Lodgings.—In accordance with established practice, lodgings which are to be placed on the register of approved premises for the use of students at the University have been inspected by the Public Health staff and the results reported to the University Authorities. Details of these inspections are as follows:—

New lodgings inspected during 1924, 64 houses with 162 rooms. Houses previously examined:—inspected 97, with 509 rooms. Drains tested:—575 drains in 161 houses; four defects in three houses.

Re-testings on completion of work, 4.

Total number of visits to above houses, 216.

Details of the nuisances found and abated are included in the table under houses let-in-lodgings.

Residential Flats.—In 64 houses there are 350 flats to which 113 visits were paid. As a result of these visits defects to the number of 13 were abated. Particulars of the nuisances found and abated are set out in the table under houses let-in-lodgings.

**Canal Boats.**—The work in connection with the registration and inspection of Canal Boats has been carried on as in past years. Particulars appear in the table appended.

#### CANAL BOATS.

9
2
II
158
706
746
2
2
27
28
• •
12

Vans and Tents.—Under the new bye-laws which came into force in June, 1923, action has been taken against people living in unsuitable vans or tents or upon unsuitable grounds, the principal contraventions of the byelaws being lack of sanitary accommodation and water supply.

#### VANS AND TENTS.

Visits to 232 vans during 1924  ,, ,, vans for infectious diseases (1 case)  ,, ,, 14 tents  ,, ,, 36 camping grounds  Additional visits for nuisances		410 3 120 210 145
Nuisances—	FOUND.	ABATED.
Dirty camping grounds	2	2
Dirty vans and tents		• •
Overcrowded vans	• •	• •
Camping grounds with no accommodation for van dwellers Other nuisances on camping grounds	50 25	50 <b>2</b> 5

Ice Cream-Street Vendors, Shops and Sheds.-The question of the manufacture, storage and sale of ice-cream received the special attention of the Health Committee, and instructions were drawn up and circulated among all ice-cream vendors. These instructions specify the conditions considered necessary to ensure the purity of ice-cream particularly with regard to the lighting, ventilation, cleansing, drainage and water supply of the premises where the article is made and stored. They also give advice respecting the materials to be used in the manufacture of ice-cream, the method of manufacture and the conditions under which it is sold. The standard of cleanliness and the quality of the ice-cream have been improved in consequence of the circulation of these instructions and generally speaking ice-cream dealers have shown a willingness to fall in with the Department's wishes. The number of visits to premises used for the manufacture and sale of ice-cream was 1,168.

ICE CREAM—STREET VENDORS AND SHEDS.

Number of vendors at end of 1924 Ice cream carts inspected	97 vis 135 153 vis 30 30  53	sits 757 sits 601
Defective walls and floors	FOUND. 19 15 2 27	ABATED.  19 15 2 27 63

Cellar Dwellings.—The following table has reference to the cellar dwellings existing in the city. There are not many but the few there are have to be kept under the strictest supervision.

#### CELLAR DWELLINGS.

Visits to 12 cellar dwellings Visits to 32 new cellar dwellings	• •	 5 12	
Nuisances— New cellar dwellings closed Other Nuisances		 FOUND. 32 7	ABATED. 29 7

Offensive Trades.—The total number of offensive trades in the city is 69 carried on in 55 establishments. There were no new applications during the year.

Following upon the adoption of Section 51 of the Public Health Acts Amendment Act, 1907, in October, 1922, a revised schedule of offensive trades was drawn up and after adoption by the Health Committee of the City Council was presented to the Ministry of Health for incorporation in an Order. After a good deal of delay the new proposals received the approval of the Ministry and a draft Declaratory Order has been issued and received the sanction of the Council. The final Order is now awaited and ought to be delivered

to the Department at an early date. The effect of this Order will be to increase the number of offensive trades given in the list under Section II2 of the Public Health Act, 1875, by the addition of the following:-

Gut Scraper. Tanner.

Rag and Bone Dealer. Leather Dresser.

Fat Melter or Fat Extractor. Fish Frier.

Manufacturer of manure from Glue Maker. Size Maker.

fish, fish offal, blood, or other

putrescible animal matter.

In the same connection Section 63 of the Leeds Corporation Act, 1924, came into force at the beginning of the year. This clause deals with the handling and storage of edible and non-edible fats and has as its object the protection of editle fats from contamination by being manufactured or stored in the same premises as non-edible fats. A circular letter was sent to all fat refiners and extractors in the city warning them that on and after the 1st January, 1925, separate provision would have to be made for the preparation and storage of the two classes of fats. As a result of this letter several man afacturers have re-arranged their premises so as to comply with the provisions of the Act, though there are still some who have done nothing. It is hoped, however, that these will come into line soon for it must be perfectly obvious that the refining of the two kinds of fat in the same premises, or, as often happens, in the same vessel, is not consistent with modern ideas of food preparation.

The total number of visits to offensive trades during the year was 642.

Factories and Workshops.—On pages 42 and 43 will be found a complete summary of the work done under the Factory and Workshop Act, 1901, and in a separate table a report on the inspection of bakehouses.

In connection with bakehouses and premises in which food is prepared, manufactured, stored or sold, the local Act of 1924 confers on the Corporation the power to make byelaws for the more efficient control of such places. Such byelaws are at present in course of preparation and will when completed and approved by the Council and Ministry of Health add considerably to the efficiency of the machinery for the protection of the food of the people.

## FACTORIES AND WORKSHOPS.

I.—INSPECTION.

	Number of				
Premises.	Inspections.	Written Notices.	Prosecutions.		
Factories (Including Factory Laundries.)	491	156	• •		
Workshops (Including Workshop Laundries.)	2,443	201	• •		
Workplaces	361	37	• •		
Total	3,295†	394	• •		

#### 2.—DEFECTS FOUND.

	Nui	ects.	Number	
Particulars.	Found.	Remedied.	Referred to H.M. Inspector.	of Prosecu- tions.
Nuisances under the Public Health Acts:—*				
Want of cleanliness	74	69	• •	
Want of ventilation	17	16	• •	
Overcrowding			• •	
Want of drainage of floors	I	I	• •	
Other nuisances	364	332	• •	
Sanitary accom- (insufficient modation. unsuitable or	16	II	• •	• •
Sec. 22 in force. defective	45	39	• •	• •
sexes	IO	6	• •	
Offences under the Factory and Workshop Act:—				
Illegal occupation of underground bakehouse (S. 101) Breach of special sanitary require-	I	I	• •	• •
ments for bakehouses (SS. 97 to 100)	. 44	44	• •	
Other offences	• •		• •	• •
Total	572	519	• •	• •

<sup>\*</sup> Including those specified in Sections 2, 3, 7, and 8, of the Factory Act as remediable under the Public Health Acts.

<sup>†</sup> Exclusive of 2,721 visits to 626 bakehouses by ward inspectors, see page 44.

# 3, 4, 5.—OTHER MATTERS.

	1		
	N	umber of	
Homework:—	Lists.	Outwor	rkers.
List of Outworkers (S. 107):— (No homeworkers on our register except amongst those		C.	W.
engaged in making wearing apparel)*	• •		
Lists received twice in the year	376	555	1228
,, once in the year	43	23	48
Addresses of received from other Authorities		114	
outworkers \( \int \) forwarded to other Authorities Notices to occupiers as to keeping or sending lists		548	
Prosecutions		• •	
Inspection of Homeworkers' premises		775	
Homework in unwholesome premises:—			
Instances		40 40	
Prosecutions		••	
Homework in infected premises:—			
Instances		8†	
Orders made (S. 110)		8	
Prosecutions (SS. 109, 110)		• •	
[Infectious cases removed, disinfection carried out under ordinary powers.]			
Workshops on the Register (S. 131) at the end of year:—		<b>- 2</b> 96	
Ordinary (127 trades)		1,086 48	
Bakehouses on register as workshops		253	
Do. domestic		373	
Total number of workshops on Register		1,760	
		-,/00	
Matters notified to H.M. Inspectors of Factories:— Failure to affix Abstract of the Factory and Workshop			
Act (S. 133)		12	
Action taken in matters referred by (Notified by H.M.			
H M Inapactors as remediable Inspector		55	
under the Public Health Acts, but taken sent to			
not under the Factory Act (S. 5). (H.M. Inspectors		109	
Other		• •	
Underground Bakehouses (S. 101):-			
Certificates granted during the year			
In use at the end of 1924		28	

<sup>\*</sup> Two of the above lists (containing 15 workpeople) received twice a year—home workers engaged in nut cracking. All others in wearing apparel.

The above table is that required by the Home Office and represents work done by the male workshops inspectors and by the women inspectors.

<sup>†</sup> Of these 8, 2 were patients suffering from Scarlet Fever, 1 from Diphtheria, 4 from Measles and 1 from Erysipelas.

## BAKEHOUSES.

Ward.			Overground.				Underground.				
WARD.		Em ploye beyon famil	es nd	Work- shop bake- louses.	Domestic bake- houses.	Em- ploye beyor famil	es nd i	Vork- shop bake- nouses.	Domestic bake- houses.	Total visits to all.	
Central		69	in	13	3	IO	in	3	• •	78	
North		42	,,	<b>1</b> 7	26	3	,,	2	2	235	
North-East		28	,,	15	31	2	,,	I		75	
*New Ward		14	,,	8	I					20	
East	• •	51	,,	26	21					149	
South		13	,,	7	24	2	in	I	• •	136	
East Hunslet		8	,,	5	46	4	,,	2	• •	216	
West Hunslet		34	,,	16	34	3	,,	2	• •	206	
Holbeck		45	,,	IO	29				• •	353	
Mill Hill		26	,,	9	9		• •		• •	182	
West	• •	30	,,	16	18					243	
North-West		72	,,	<b>1</b> 7	32	12	in	6	I	179	
Brunswick		39	,,	ΙΙ	10	3	,,	I	• •	190	
New Wortley		28	,,	12	8				• •	46	
Armley & Wor	tley	31	,,	18	30					135	
Bramley		ΙI	,,	6	18				• •	60	
Headingley		88	,,	26	<b>2</b> 6	6	in	3	4	218	
Totals	• •	629	in	232	366	45	in	21	7	2,721	

<sup>\*</sup> Roundhay, Seacroft, Shadwell and Crossgates.

These visits made by Ward Inspectors only. This work is included in the figures given in table on page 34.

OTHER VISITS PAID BY MALE WORKSHOPS INSPECTORS.

			Factories.	Workshops.	Workplaces.
Non-abater	nents		 203	415	30
Drain Insp	ection	• •	 42	21	I
Drains tes	ted	• •	 31	25	4
Disease en	quiries	• •	 37	2 I	15
River poll	ition		 5		
Complaints			 211	54	17
Measureme	nt of wor	krooms	 	300	
Other caus	es		 108	338	29
Τ	OTAL		 637	I,I7.	96

Plans.—The system whereby plans submitted to the Building Surveyor dealing with alterations to property involving sanitary works are reviewed by this Department before being finally approved by the Corporation was continued throughout the year. The total number of plans examined and commented upon was 327.

Work of Women Inspectors.—Two women sanitary inspectors are constantly engaged in visiting the homes of outworkers, in carrying out investigations into outbreaks of infectious disease in factories, workshops and schools and attending to complaints received from the factory inspectors or other sources as to sanitary defects affecting the health of the workers in factories and workshops. The following is a summary of their work.

Infectious Diseases.—The following visits were made:—

To	schools (on account of	of 846 of	cases)		1,532
To	absent pupils				83
To	factories (74 cases)				148
To	workshops (4 cases)				7
To	workplaces, including	restaura	ints (23	cases)	32
To	absent employees			• •	13

Outworkers.—Visits paid to the homes of outworkers numbered 2,472. In addition to these, 226 visits were paid to the premises of employers of outworkers.

Factories and Workshops.—Part of the work done by the women inspectors under this heading appears on pages 42 and 43.

In addition to that appearing in the table the following visits were paid:—

Factories	79
Workshops (routine and on complaint)	153
Workplaces and restaurants do	157
Houses, on receipt of complaint	IO
Public sanitary conveniences	104
Total	503

Nuisances found 45, abated 42.

Rat Repression.—The office of Executive Rats Officer terminated at the end of the year, his duties being split up between the two Divisional Sanitary Inspectors who are now the Executive Rats Officers for the city.

War has been waged upon the rat pest with increased vigour during 1924. The whole problem of rat and vermin destruction is unsatisfactory and should be placed on a proper basis. It is useless to expect a tenant to undertake structural alterations and incur expense on the improvement of property which does not belong to him. This is a duty which should devolve upon the owner but the Rats and Mice Destruction Act, 1919, lays the onus of such work on the occupier whilst the owner receives the benefit. Naturally tenants object and prefer, rather than submit to such an obviously unfair demand, to put up with the rats.

In accordance with the suggestion of the Ministry of Agriculture and Fisheries a "Rat Week" was observed in Leeds from November 3rd to November 10th. The attention of the public was directed through the Press to the importance of taking steps to exterminate rats coming in from the fields and hedgerows at this particular season of the year. Printed leaflets giving instructions as to how to deal with the pest were supplied to all persons interested enough in the campaign to apply for them, and free supplies of suitable poisons were issued to those unable to purchase them for themselves. An attack was made on the rats in the sewers and on several of the refuse-tips belonging to the Corporation. Altogether over a thousand baits were laid and as far as can be ascertained the majority were

taken. Although it is quite impossible to give the results in actual figures, it may be assumed that the mortality was considerable.

Particulars of the work of the rats officer for the year are appended.

Complaints received	176
Premises inspected	420
Premises found to be more or less infested with rats	306
Premises cleared	263
Premises where infestation was diminished	23
Cases in which rat proofing was carried out	185
Cases in which drainage was found defective	36
Cases in which rat-catchers were employed	61
Premises with work in hand at end of year	15
Rats caught by ferrets, dogs, cats, traps, or	
killed by hand or found poisoned	3,451
Visits for purpose of observation, work in	
progress, or work done	922
Visits for other causes, such as appointments,	
interviews with owners and others, enquiries	250
Informal notices served	200
Notices complied with	188

The Rag Flock Act, 1911.—During the year five official samples of rag flock were taken and submitted for analysis, the results being as follows:—three contained soluble chlorine in excess of the standard laid down in the Act whilst two were within the standard. As regards the former, letters were sent to the firms concerned warning them that if they continued to offend proceedings would be taken. In one case the warning had the effect of inducing the firm to instal new washing machinery whilst in the case of the other two, neither of whom were makers, a promise was extracted that they would give up the use of unwashed flock.

In addition to the five official samples above mentioned eight unofficial samples were taken of various kinds of rags with a view of determining their chlorine content. The results of the analyses seemed to show that where the rags had been washed the amount of chlorine was well within the legal limit whereas in unwashed rags and such material as wool, kapok and jute the standard was largely exceeded.

Fertilisers and Feeding Stuffs.—No samples were taken during the year.

#### SMOKE.

The campaign against the smoke nuisance which is perhaps the most unhealthy and most dangerous influence with which the city has to contend was carried on throughout the year with unabated vigour. I know that the critics will complain that there have been too few prosecutions and that there is as much smoke and dirt in the atmosphere as ever there was. The smoke gauges situated in different parts of the city have, however, another story to tell. the records from these instruments are to be regarded as a true measure of the amount of atmospheric impurity, then taking the year as a whole there has been a decided improvement. The problem is hedged round with all sorts of difficulties and to those who are acquainted with the actual facts it will not occasion any surprise to learn that progress has been slow. I am not one of those who believes that in repressive legislation alone lies the solution of the problem; on the contrary, I am convinced that the power of the law with regard to smoke abatement, as it at present exists, is very limited and of itself, unless drastically amended, cannot do more than touch the fringe of the problem.

There is a lot of speculation as to whether the factory or the domestic chimney causes the greater nuisance. To try and apportion the blame as between the two is perfectly futile and a waste of time because after all the main thing is not to determine whether the factory or the domestic fire is the greater sinner, but to discover the best means of reducing the amount of pollution caused by bo h. The lines on which the Department has worked during the year are those which seem to give the best results and are largely based on the education of stokers, firemen and employers in the best methods of using coal fuel so as to obtain from it the maximum efficiency in heat and power. A little education is worth far more than a lot of persecution and though one never hesitates to take an offender into court if he continues, notwithstanding advice and warnings to break the law, one does so as a last resort. In the ordinary course of sanitary administration if a man commits a nuisance he is warned by notice to that effect and he is at the same time advised as to how best he can abate the nuisance. If he ignores the warning and continues to offend, a second notice is served upon him and it is only after the expiry of that notice that he is taken before the magistrates. Precisely the same method is adopted in regard to smoke nuisances.

I should like to call attention to the details of the work of the smoke inspectors for the year set out in the subjoined tables. From these it will be seen that the number of chimneys emitting dense smoke in excess of the time limit of 3 minutes in the hour was only 113 out of a total of 6,773 observations, a large proportion of which

offended only to the extent of I minute over the legal standard. Compared with previous years this number shows a great reduction as may be seen by an examination of the figures in the second smoke table.

Some idea of the effect which smoke has on the amount of sunshine in the city may be gathered from the table on page 50 in which Leeds is compared with Southport as regards sunshine and rainfall in 1924.

The work of the smoke inspectors is given in detail in the subjoined table.

(I)				
		1924.		1923.
Complaints received	• •			6
Furnaces inspected		3,612		3,971
Observation of chimneys (I hour each)		6,773		6,007
Number of minutes dense smoke		4,770	• •	5,394
Average duration of dense smoke	per			
observation of one hour		o min.	•-•	o min.
		42 secs.	54	secs.
Number of chimneys found emitting de	nse			
smoke three minutes per hour	0 •	113	• •	202
Smoke prevention appliances adapted	to			
furnaces	• •	IO	•-•	28
Furnaces altered or reconstructed	• • •	67	0-10	27
Furnaces superseded, plant electrified	• •	4		
Firms who have adopted smokeless fuel	• •	6	••	9
Chimneys newly erected	• •	8	0-110	2
Furnaces in connection with new chimneys	S	9		2
Notices served on manufacturers		7		IO
Notices served on stokers	• •	70	• •	34
Prosecutions	• •	2	• •	I
Total amount in fines	To	pay cost	ts	£5

SMOKE OBSERVATIONS, 1920-1924.

(2)						
Year.	Observations of Chimneys (I hour each).	No. of Chimneys found emitting dense smoke (three minutes per hour).	Percentage to observations.			
1920 1921 1922 1923 1924	4,392 3,286 3,853 6.007 6,773	544 281 275 202 113	12·4 8·6 7·1 3·3 1·7			

Leeds compared with Southport.

Sunshine and Rainfall during 1924.

Increase or Southport. 0.49 2.67 0.85 decrease 0.35 0.32 0.84 Rainfall. 60.0 2.00  $I \cdot I O$ 10.82 O·II 0.04 2.84 Inches. Leeds. over + + 1 Southport. Rainfall Inches. 36.98 0.78 1 · 1 5 I.48 5.22 96.1 4.36 4.48 I.55 4.38 4.82 4.07 Rainfall. Leeds. Inches. 3.53 1.57 3.22 3.26 86.1 1:13 I.64 3.23 I • 5I 26.16 2.24 I.04 1 · 81 Increase or Southport 52.0 31.3 231.8 Sunshine. decrease 20.5 2.9 9.5 26.3 121.4 20.0 11.4 12.7 0.4 I • 0 I - I2·I Leeds. Hours. over 1 Southport. Sunshine. Hours. 41.0 168.7 9.96 46.0 149.7 154.3 2.22<sub>1</sub> 0.981 65.1 121.0 54.I 150.2 1,410.4 Sunshine. 1,178.6 44.6 8.681 176.8 137.5 149.8 129.5 65.3 Leeds. 140.5 42.0 2.19 125.7 70.3 Hours. 6.121 175.4 157.2 142.6 0.291 0.991 123.9 Local Stations. Lawnswood Lawnswood Lawnswood awnswood Lawnswood Lawnswood Lawnswood Lawnswood Lawnswood Lawnswood Lawnswood Lawnswood Lawnswood Museum . November.. 1924. September December February October January August March April June July Year May

## FOOD.

Much more attention is being paid to-day to the food of the people than ever before in the history of this country. There are two reasons for this, the chief of which is the ever increasing degree to which the country is dependent on overseas sources of The volume of imported food stuffs has risen at a rapid rate since the close of the war. Some of these emanate from parts of the Empire as far away as Australia and South Airica and where the time which elapses between the preparation of the food for sale and its actual sale to the consumers is so great it necessarily follows that steps must be taken to prevent its deterioration and preserve it in a fit state for human consumption. In order to do this, all sorts of devices, good and bad, innocent and dangerous are resorted to and it requires the greatest diligence on the part of the inspectors at the ports and centres of distribution to insure that all imported food is sound and wholesome. The use of preservatives of various kinds chiefly of a chemical nature has increased in recent years. Some of these are distinctly injurious to health, whilst others though not themselves injurious are often used to cover up signs of decomposition in certain perishable foods.

A Commission recently appointed by the Government to go into the question of the use of preservatives in food has recently reported and made certain important recommendations which it is hoped will in due course be embodied in a Statutory order. The second reason is the growing tendency of the people to depend on prepared and cooked foods. Unless such foods are handled and stored with due precautions against contamination they are liable to become media for the growth of disease bacteria in addition to which they are often sophisticated to such an extent as seriously to interfere with their food value. If the public knew the truth about these prepared foods, which, by the way, are generally put up in very attractive containers, they would not be so eager to buy them. They may be quite pleasant to eat and quite harmless but they lack the nourishing properties of fresh food properly prepared and properly cooked. Besides they are uneconomical, which is an

important fact in these days of hardship and distress. The people know to demand pure, clean, and wholesome water and they should possess the same knowledge with regard to their food.

Cows and Cowsheds.—The total number of farms in the city visited for purposes of inspection of cows and cowsheds was 151, and the total number of visits paid 618. At two of the farms there were no cows kept; ten discontinued and two commenced the keeping of dairy cows during the year, leaving at the end of the year a total of 139 farms still in use as dairy farms in the City. The number of cows examined was 2,063 and the total examinations made 7,500. At 6,831 (or 91·1 per cent.) of the examinations the cows were found to be clean, and at 669 (or 8·9 per cent.) dirty. As regards the health of the 2,063 cows examined, 38 (or 1·8 per cent.) were found to be diseased, five (or 0·2 per cent.) having tuberculosis of the udder, eight (or 0·4 per cent.) generalised tuberculosis and 25 (or 1·2 per cent.) diseases other than tuberculosis. In every case where tuberculosis was diagnosed the farmer was instructed to isolate the cow from the rest of the herd, and destroy the milk.

The number of cowsheds inspected was 223 and the total number of inspections 917, whilst the number of yards visited was 144 with a total of 587 inspections. The sheds were reported clean at 785 (or 85.6 per cent.) visits and dirty at 132 (or 14.4 per cent.), whilst the yards were clean at 506 (or 86.2 per cent.) visits and dirty at 81 (or 13.8 per cent.). Thirty-five (or 15.7 per cent.) of the sheds in use are unsatisfactory and should be abolished.

The above figures reveal a slight improvement in the standard of general health of the dairy cows kept in the City. The percentage of tuberculous cows was 0.63 as against 0.74 for the previous year whilst only 1.21 per cent. were affected with other diseases as against 1.58 per cent. in 1923. In the group designated "other diseases" the most important is suppurative inflammation of the udder (mastitis). This improvement in the general health of the cows is probably incidental and not to be ascribed to greater care on the part of the farmer. As a matter of fact, the number of cows found dirty on inspection, namely, 8.9 per cent., compares badly with the number for the previous year, 5.9 per cent. The cleanliness of the sheds showed little or no improvement, the figures for the two years being practically the same.

Reviewing the year's work, therefore, one has regretfully to confess that as far as cleanliness of methods are concerned there has been little progress. The Yorkshire farmer is a slave of tradition. He lives in the past and anything modern to him is anathema. Ready enough to admit the value of modern methods, he will admit it only for others, not for himself. Perhaps the greatest disappointment of the year has been the poor response made by the farmers to the appeals and urgings of the Veterinary Inspector and his staff to take up the production of graded milk. They have had every encouragement and the offer of advice and help whenever required, but all to no purpose. They cling with a devotion which is almost pathetic to the old order of things and the primitive methods of their forefathers. They have no faith in the modern methods of milk production as is evidenced by the fact that notwithstanding all our efforts there was at the end of the year not a single farmer within the City boundary producing graded milk. But whilst we have failed to achieve anything tangible we believe that our work has not been altogether in vain. Signs are not wanting of a change of heart; interest has been awakened and it is only a matter of time before that interest assumes tangible form. The demand for graded milk is increasing, and as its virtues come to be better appreciated by the main body of the public, the milk producers in the City will either have to fall into line with their more enterprising and progressive brethren in the County who are at present supplying the demand or be crushed out of business. The retailers are also beginning to make a move in the direction of the better article, and this added pressure from the inside should help towards the final achievement of our ambition—the total abolition of the milk-can and open churns and the universal adoption of graded milk in sealed bottles.

With the object of inducing the city farmer to go in for the production of graded milk a clean milk competition has been instituted in the city. This competition will continue throughout the year and ought to give us valuable information as to the quality of the milk and the methods of production. Certificates will be awarded at the end of the year to those producers who obtain the requisite number of marks.

At the beginning of the year only two firms of milk retailers had applied for and obtained a licence to sell graded milk; at the close the number of licences issued had increased to four, viz., two "Certified" and two "Grade A."

The dairy herds at the two farms owned by the City Council have been kept under close observation by means of monthly inspections. At both of these farms the standard of cleanliness and the methods employed in milk production and handling result in the production of a milk which is up to the standard of "Grade A" although neither farm has, as yet, applied for a licence to use that designation in accordance with the Milk (Special Designations) Order, 1923. In March, all the cows at Skelton Grange were submitted to the tuberculin test and the majority withstood it. This is the most searching test to which a cow can be put and if withstood proves complete freedom from tuberculosis. I am very anxious that Skelton Grange herd should be kept tubercle free because the milk is used exclusively for the feeding of babies and young children.

In addition to examining cows and cowsheds within the city, the Veterinary Inspector paid 10 visits (including those in connection with tuberculous milks from outside areas) to cowsheds outside the city and inspected 194 cows. Of these 167 (or 86·0 per cent.) were found to be clean and 27 (or 14·0 per cent.) dirty; 20 sheds were inspected and 8 (or 40·0 per cent.) found clean, and 12 (or 60·0 per cent.) dirty; four ot the yards (or 50·0 per cent.) were clean and four (or 50·0 per cent.) dirty. Of the 194 cows examined, two were found to be suffering from tuberculosis of the udder, two from tuberculosis of other organs, and one from disease other than tuberculosis.

The following table shows the number of cowsheds and milk retailers in the City and gives a summary of the work done by the Food and Drugs Inspectors in connection with the milk supply.

Number of milk retailers in the City	 428
Number of cowsheds premises in the City	 151
Number discontinued during year	 10
Number commenced during year	 2
Number of cowsheds where no cows are kept	 2
Number in use at end of year	 139
New cowsheds built	 I
Cowsheds improved or reconstructed	 13
New dairies built	 8
Visits to milkshops	 2,251
Visits to cowsheds	 319
Visits to Railway stations	 511
Visits to farms or milkshops re infectious disease	 19
Visits to food shops and bottled milk stores	 992

Milk and Food Analysis.—The subjoined tables set out the number of samples of milk and other foods taken during the year and examined by the City Analyst, with information as to quality and composition and results of Court proceedings.

SAMPLES OF MILK AND CREAM SENT TO THE CITY ANALYST FOR EXAMINATION DURING 1924.

			Taken forma		Taken		Taken in	formally.
Article.		Genuine.	Adul- terated.	Total.	Genuine.	Adul- terated.	Genuine.	Adul- terated.
Milk		74I	40	781	739	38	2	2
Skim Milk	• •	5	I	6	5	I	• •	
Cream	• •				• •	••	••	
Total	• •	746	41	787	744 78	39	2	<sup>2</sup>

The average composition of the 787 milk samples taken during the year was:—

	1924.	Standard.
Non-fatty solids .	8.97 per cent.	8.50 per cent.
Fat	3.75	3.00 ,,
Total solids .	12.72 per cent.	II.50 per cent.

Of the 41 samples of milk found to be adulterated, 19 were adulterated by the addition of water, 14 by the partial abstraction of fat, four by the addition of water and the partial abstraction of fat and four by the addition of preservatives. The largest amount of added water found in any sample was 67.2 per cent. The retailer was proceeded against and fined £5.

The most serious deficiency of fat was II·4 per cent. This sample was also adulterated by the addition of 9·6 per cent. of water. Proceedings were taken and the summons dismissed on payment of costs.

The largest amount of preservatives added was 0.05 per cent. of boric acid. Proceedings were taken and the case dismissed.

Guinea Pig Tests.—During the year in addition to the samples of milk submitted to the City Analyst, 68 samples were sent to the School of Medicine for examination for the presence of tubercle bacillus. One (or 1.5 per cent.) was returned as positive whilst three (or 4.4 per cent.) were returned as suspicious. Al! of these were derived from farms outside the City boundary. The report of the Veterinary Inspector on the visits to these farms is given under the heading "Tuberculous Milk from outside Areas." Besides the 68 samples submitted for examination for the presence of tubercle bacillus, 12 samples were also submitted to the City Bacteriologist for examination as to bacterial content. Eleven were samples taken from the Corporation farms at Templenewsam and Skelton Grange whilst the remaining sample was one of "Grade A" milk. All but three were returned as having a bacterial content within the standard prescribed by the Ministry of Health for "Grade A" milk.

Tuberculous Milk from Outside Areas.—During the year 68 samples of milk were taken and submitted to the City Bacteriologist for examination for the presence of tubercle bacilli. The majority, namely, 66 (or 97 o per cent.) of such samples were of milk produced outside the City. Of the total, one sample was declared to contain tubercle bacilli, whilst three others were reported as suspicious. As a result, the Veterinary Inspector made seven visits of inspection to five farms and examined 98 cows, finding two affected with tuberculosis of the udder, two with tuberculosis of other organs and one with disease other than tuberculosis.

In connection with tuberculous cows detected both inside and outside the City, the absence of any powers to deal effectively with them must again be deplored. Year by year the need for the revival of the Tuberculous Order of 1913 or some legal instrument giving similar powers becomes more evident, as in the absence of such authority local authorities are quite impotent to control the disposal of animals so diseased, which are a danger both to healthy animals and to the Public Health.

Milk and Cream Regulations.—All samples of milk submitted to the Analyst were tested for the presence of preservatives. Four of the samples taken formally were found to contain boric compounds. Proceedings were taken in three of the cases. The fourth case was a repeat sample taken in conjunction with one of the three cases proceeded against.

Food and Drugs.—The Food and Drugs inspectors paid 992 visits to shops and other premises in connection with the administration of the Sale of Food and Drugs, and Margarine Acts, and took 233 formal samples and 27 informal samples, the result of the analysis of which appear in the subjoined table.

SAMPLES OF FOOD OTHER THAN MILK AND CREAM, SENT TO THE CITY ANALYST FOR EXAMINATION DURING 1924.

							11 to 1 to 1 to 1 to 1	
					Taken fo	ormally.	Taken in	formally.
Article.		Genuine.	Adul- terated.	Total.	Genuine.	Adul- terated.	Genuine.	Adul- terated.
Butter Lard		59 50		62 50	59 50	2		I • •
Dripping White Pepper		2 9	I	3	9	I		
Polony Malt Vinegar	• •	6	2	9 8	6 20	2 2		
Vinegar		20 II	2	22 II	II		• •	• •
Prescription Whiskey		6 4		6 4	6			• • • •
Tea Ground Rice		4		-1	4	• •		
Potted Beef		3 2	• •	3 2	3 2	• •	• •	
Cream of Tartar Oatmeal		-1 3	· · I	4 4	4 3	· · I		
Demarara Sugar		8 6		8	3 8 6	 I	• •	
Beer		25	1 8	7 33	11	2	· · I 4	6
Olive Oil Self-Raising Flour	• •	3 6	• •	3 6	3 6			
Cheese		I	• •	I	1 4		• •	
O1 1 T1 11		4	2	4 6	4		4	2
TOTAL		240	20	260	222	II	18	9
				f	23	33	2	7

Meat.—During the year, the private slaughterhouses were reduced in number from 67 to 66. Of these 57 are registered and 9 licensed. Two slaughterhouses have been removed from the register during the year, one by order of the Committee in consequence of its being used for other purposes and the other has been demolished by the extension of neighbouring property. The licensed slaughterhouses were increased by one, viz., a pig slaughterhouse at Farnley.

In addition there are two knackers' yards, both of which have existed for more than twenty years.

The private slaughterhouse, however well conducted—and the majority in Leeds are in that category—continues to constitute a great difficulty in the way of instituting a satisfactory system of meat inspection, and I should like to repeat the remarks on the subject made in last year's report with the addition that the year under consideration has served to emphasise the urgent need for the extension of the Public Abattoir. Until this is done no progress can be made in dealing with the private slaughterhouse, in addition to which the present congestion makes inspection very difficult and is not good for the meat which is exposed to unnecessary risks of contamination. The new meat regulations which came into torce in April, 1925, will be of great advantage to Local Authorities in that they confer much wider powers of control, not only over the slaughter of animals for food but also over the storage and handling of meat. Such powers as these have long been wanted. The manner of handling meat in course of transport in this Country has been notorious for its lack of care and cleanliness, and the new regulations will do much to remove that reproach.

SLAUGHTER-HOUSES IN USE.

	1914.	January, 1924.	December, 1924.
Public Abattoir  Private slaughter-houses (registered)	<b>2</b> 63	I 59	1 57
Do. (licensed)  Knackers' Yard	10 2	8 2	9

There were 8,020 visits paid to slaughter-houses and 8,010 visits to sausage and potted meat factories, markets, shops and stations.

During the first four months of the year, the City was included in an infected area under the Foot and Mouth Disease Orders. This rendered necessary great vigilance on the part of the inspectors and increased their work by making them responsible to the Cattle Diseases Committee for enforcing the slaughter of animals within the time allowed by movement licences.

# SUMMONSES ISSUED DURING 1924, UNDER THE SALE OF FOOD AND DRUGS ACTS.

No. of Sample	Article.	Adulteration or Offence.	Fines. £ s. d.	Remarks.
21	Milk	10.5% added water; 3.8% fat deficient		retailer: to pay 15/-costs.
29	Do	12·4° added water	)	
30	Do	7.5° do	}	farmer: to pay 30/ costs.
103	Do	$7.5^{\circ}_{.0}$ do	\\ \o \cdot \\ \o \o \cdot \\ \o \cdot \\ \o	farmer: to pay 30/6
104	Do	7·3% do	1 0 0	costs.
230	Do	9.6% added water; 11.4% fat deficient	• •	retailer: to pay 10/6 costs.
295	Do	9.5% added water; 4.5% fat deficient	5 0 0	farmer: to pay 15/6 costs.
310	Do	0.05% of boric acid		retailer: case dismissed.
317	Do	0.03% do	} I 0 0	retailer: to pay 10/6
335	Do	Trace of boric acid		costs.
362	Do	15.5% added water		adjourned <i>sine die</i> on condition retailer gave up sale of milk.
383	Do	$7.5^{\circ}_{/0}$ added water	• •	farmer: dismissed on probation on payment of 20/- costs.
426	Do	$6 \cdot 7^{\circ}_{70}$ added water		adjourned sine die.
504	Ъо	0.03% of boric acid		retailer: dismissed on probation on payment of 10/6 costs.
229	Skim Milk	$67 \cdot 2\frac{0}{0}$ added water	5 0 0	retailer.
232	Butter	$1 \cdot 2 \%$ of water in excess	• •	retailer: dismissed on production of warranty.
260	Do	$6 \cdot 5^{\circ}_{00}$ of water in excess		retailer: dismissed under Probation-Act, to pay 15/ costs.
	J		£12 0 0	

At the Public Abattoir, a meat inspector is on duty at all times when slaughtering is in progress and Kirkgate Market itself is patrolled several times a day. A total of 8,020 visits have been paid to private slaughterhouses and 8,010 visits to shops, cold stores, sausage and potted meat factories, railway stations, etc. A meat inspector is on duty every Sunday morning whose duty it is to visit and inspect wholesale pig slaughterhouses and shops, vehicles and stalls in the public street from which meat, rabbits, poultry, etc., are offered for sale. In this particular connection, I am pleased to say that whilst in the Bank and High Street districts the number of shops open on a Sunday morning for the sale of foodstuffs tends to increase, the number of stalls, barrows, etc., has greatly diminished within the last few years.

Practically all the meat, etc., condemned as unsound was surrendered and sent for destruction with the consent of the owner or person in possession, but in three instances it was deemed advisable to make official seizures with a view to further proceedings being taken. In one case the owner was fined £5 and costs for exposing unsound hams for sale; in another, a case of unsound meat, after due consideration of all the circumstances under which the meat was seized, it was not deemed advisable to pursue the case further; and in a third, the sale of unsound eggs, the difficulties were such as to make prosecution of the vendor inadvisable. The two last mentioned were warned by letter from the Medical Officer of Health.

Samples of a consignment of mussels suspected of being contaminated were taken, and on receipt of the bacteriologist's report that their examination suggested the possibility of sewage pollution, steps were taken to prevent their sale and to exclude further consignments from the same source from the market.

The work of the meat inspectors is shown in the following table:—

MEAT, ETC., DESTROYED BY CONSENT.

	1924.	1923.	1922.	1921,
Beef	137,660 lbs.	121,087 lbs.	122,483 lbs.	143,503 lbs.
Veal		4,659 ,,	4,588 ,,	4,572 ,,
Mutton	8,214 ,,	6,963 ,,	6,360 ,,	8,458 ,,
Bacon and Ham	224 ,,	214 ,,	508 ,,	•,45• ,,
Pork		9,957 ,,	11,238 ,,	4,963 lbs.
Goat Flesh	80 ,,	•••	• • •	1,3 3
Offals	25,971 ,,	23,270 lbs.	32,514 lbs.	18,856 lbs.
Rabbits	16,407 ,,	20,095 ,,	21,497 ,,	194,243 ,,
Poultry	10,825 ,,	4,707 ,,	5,709 ,,	5,690 ,,
Game	III ,,	476 ,,	I,I24 ,,	797 ,,
Eggs	15,453	27,138	29,655	50,646
Cheese	56 lbs.	• •	896 lbs.	4,203 lbs.
Fish	100,502 ,,	103,877 lbs.	78,189 ,,	123,757 ,,
Shellfish	86,952 ,,	103,672 ,.	77,484 ,,	99,269 ,,
Fruit	24,336 ,,	16,174 ,,	21,758 ,,	11,886 ,,
Vegetables	66,087 ,,	114,030 ,,	40,931 lbs.	<b>2</b> 7,094 lbs.
Inedible fungi		14 ,,	110 ,,	
Edible fungi	120 lbs.	168 ,,	138 ,,	1,317 lbs.
Butter		• •	• •	382 ,,
Yeast	448 lbs.	3,920 lbs.	876 lbs.	6,709 ,,
Tinned Goods	3,947 ,,	5,643 ,,	9, <b>90</b> 3 ,,	9,443 ,,
Sundries	• •	• •	• •	424 ,,

**Tuberculous Carcases.**—The number of carcases condemned for tuberculosis during 1924 was as follows: 141 carcases of beef and organs, 2 carcases of veal and organs, 22 carcases of pork and organs.

## INFECTIOUS AND OTHER DISEASES.

A complete summary of cases notified of all the notifiable infectious diseases will be found in the Appendix (Table II.).

The most conspicuous feature of the year as regards the prevalence of infectious disease was the re-appearance of smallpox and the increased number of cases of enteric fever, measles, encephalitis lethargica and pneumonia (acute primary and acute influenzal) and the reduction in the number of cases of scarlet fever and diphtheria.

Smallpox.—Seven cases of smallpox were notified during the year, the largest number since the year 1905. The type was mild and there were no deaths. The disease had been prevalent in epidemic form in certain areas of Yorkshire and the adjoining counties of Derbyshire and Lancashire, so Leeds may consider itself fortunate in having escaped so lightly.

The first case (a man) occurred in a common lodging-house on the south side of the river on July 16th and was followed by a second case in the same lodging-house on August 2nd. The lodging-house in question has accommodation for 160 male lodgers and at the time of the outbreak the inmates numbered 74. As soon as the diagnosis was established disinfection of the premises including bedding and the personal clothing of the inmates was carried out. The men were urged to be vaccinated as being the surest means of preventing the disease and 58 consented and were vaccinated by the Public Vaccinator. No further case occurred in this lodging-house.

On August 16th a boy was removed to hospital from the Hunslet district suffering from the disease which, on investigation, proved to have been contracted by contact with the lodging-house case. The boy's family was removed to the isolation cottages at Seacroft for a period of 15 days and on the seventeenth day the mother exhibited symptoms of the disease and was transferred to hospital.

The practice in the past has been to fix the quarantine period of smallpox at 14 days but the experience in the case of this woman made a revision of the quarantine period necessary and in all subsequent cases the contacts were isolated for 18 days.

The fifth case occurred, in a boy aged 6, on August 18th in the Brunswick Ward. The history of the case was that he had arrived from the Dewsbury Workhouse two days previously, so that the infection was probably contracted outside the City though no evidence could be found of there having been any case in Dewsbury. In this case also the contacts were removed and the usual precautions taken but no subsequent case occurred.

On September 30th a man and wife residing in Burley were notified as having the disease and were removed to hospital. It was found on investigation that the infection had probably been contracted in a boarding-house at one of the seaside resorts where the two had spent a holiday. In this case there was some delay in arriving at a definite diagnosis but in spite of this no further case occurred in the family or neighbourhood.

In addition to the above, a Leeds school boy aged 13 developed the disease on July 30th at a seaside camp and was transferred to Seacroft Hospital at the request of the Medical Officer of Health for the area. The camp was broken up and all the boys brought to Leeds and isolated in the quarantine cottages for a period of 14 days. No other case occurred.

The outstanding features of all the cases were the absence of severe constitutional symptoms, the non-intectivity of the type, the rapid recovery of the cases without disfigurement and the protection afforded contacts by early vaccination.

The question may be asked were all these cases true cases of Smallpox? In my own opinion and in the opinion of other medical experts who saw them they were. It was certainly a mild type but none the less Smallpox.

Before closing the subject I should like once more to remind the public of the risks they run both as individuals and as a community by persisting in their negative attitude towards vaccination. Leeds at the present time may be said to be an unprotected city, the greater proportion of the children being unvaccinated. In this respect it is probably no worse than any other part of the country but sooner or later it may be called upon to face an outbreak of smallpox of virulent form when things will certainly go hard with the population, particularly the children.

MEASLES.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1914			218	0 · 48	0.25
1915	• •		78	0.17	0.46
1916	6,911	15.48	149	0.33	0.19
1917	5,094	11.62	277	0.63	0.31
1918	6,719	15.71	417	0.98	0.29
1919	2,605	6.05	48	0 · 11	0.10
1920	5,523	12.30	148	0.33	0.19
1921	240	0.52	5	0.01	0.06
1922	10,078	21.29	152	0.33	0.12
1923	5,224	11.12	50	0 · 11	0.14
1924	7,037	14.92	46	0.10	0.13

AGES AT DEATH FROM MEASLES.

1924	0-1	I-2	2-3	3-4	4-5	5-10	10-15	Tetal.
No. of Deaths	8	28	5	5			• •	46

Measles.—The number of cases of measles notified during the year was 7,037 (measles 6,654, German measles 383) which was 1,813 in excess of the number for the previous year, though 3,041 lower than the number for the year 1922. Measles in epidemic form occurs in cycles, the cycles occurring roughly every two years. The last epidemic year was 1922, the one previous to that 1920 and previous to that again 1918. The total number of deaths certified as due to the disease or its complications was 46, giving

a death-rate of 0·10 per thousand of the population as compared with 50 deaths and a rate of 0·11 for the previous year as compared with 152 deaths and a rate of 0·33 for the previous epidemic year (1922). The prevalence of the disease was greatest during the second and third quarters of the year and reached its maximum in June.

During the 1922 epidemic a special ward at Killingbeck Sanatorium was opened for the treatment of cases occurring in institutions, overcrowded houses or homes where the nursing facilities were inadequate. It was not found necessary on this occasion to resort to this the demand for beds being fully supplied by the hospital at Seacroft. The number of cases treated in hospital was 102 and in addition arrangements were made for the nursing of 22 cases in their own homes by the District Nursing Associations.

Whooping Cough.—The number of deaths from this disease registered during the year was 87, an increase of 55 (or 63-2 per cent.) on the number for 1923. The death-rate was 0·18 or 0·11 in excess of the rate for the previous year (0·07). There would seem to be no similarity between this disease and measles and yet the strange thing is that they invariably occur in epidemic form together. The years 1918, 1920, 1922 and 1924 were epidemic years for both diseases as may be seen by comparing the tables on pages 66 and 64. Both diseases attack children in the early years of life but of the two, whooping cough occurs most frequently and is most fatal amongst infants in the first year of life.

Scarlet Fever.—The type of scarlet fever prevalent in the City during the year has been mild but it must not be deduced therefrom that it was easier kept in check. As a matter of fact when the type is mild it is more difficult to control because so many cases pass unrecognised hence the necessity of exercising care in examining all cases which exhibit suspicious signs. The number of cases notified was 1,256 giving an attack rate of 2.66 as compared with 2,134 in 1923 with an attack rate of 4.54. The number of deaths resulting from the disease was 20 equal to a death rate of 0.04, as compared with 31 and a death-rate of 0.07 for the previous year. The number of cases removed to hospital was 1,179 or 94.7 per cent. of the cases notified. It is doubtful whether such a high percentage of the cases really require hospital treatment; many could with equal advantage to the patient and considerable saving to the City be treated at home though one is bound to recognise the difficulty of

home nursing under the conditions of overcrowding so common at the present time. Professional and expert opinion on hospital treatment of scarlet fever is changing and the present tendency is for more cases to be nursed at home and fewer removed to hospital. Strictly speaking the hospital should be reserved for cases for which adequate accommodation and treatment cannot be found at home.

Erysipelas.—Notifications were received of 237 cases of this disease as compared with 205 in the previous year. There were 10 deaths, a decrease of 7 as compared with the previous year.

Whooping Cough

Year.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1914	141	0.31	0.22
1915	158	0.34	0.23
1916	45	0.10	0.18
1917	69	0.16	0.13
1918	130	0.30	0.30
191 <b>9</b>	66	0 · 15	0.07
1920	100	0.22	0.12
1921	72	0 · 15	0.13
1922	115	0.25	0.14
1923	32	0.07	0.11
1924	87	0.18	0.10

AGES AT DEATH FROM WHOOPING COUGH.

1924	0-I	I-2	2-3	3-4	4-5	5–10	10-15	Total.
No. of deaths	35	28	15	8	I	• •	• •	87

SCARLET FEVER.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate England and Wales.
1914	1,346	2.94	30	0.07	0.08
1915	1,454	3.12	30	0.07	0.07
1916	881	1.97	23	0.05	0.04
1917	543	I·24	7	0.02	0.02
1918	570	1.33	19	0.04	0.03
1919	1,340	3.11	23	0.05	0.03
1920	1,363	3.04	17	0.04	0.04
1921	1,526	3.28	14	0.03	0.03
1922	2,722	5.83	33	0.07	0.04
1923	2,134	4.24	31	0.07	0.03
1924	1,256	2.66	20	0.04	0.02

Puerperal Fever.—There were 53 cases notified during the year as compared with 51 last year. Of these 25 (or 47.2 per cent.) were in the practices of midwives, 14 (or 26.4 per cent.) in the practices of doctors and 14 (or 26.4 per cent.) in institutions. The number of deaths recorded was 9 which is one less than the number for the previous year and the death-rate was 0.02, the same as for 1923. Eight of the deaths occurred in institutions—the majority in lying-in The latter fact might have rather a disquieting institutions. significance were it not explained that the majority of the cases are sent there after the disease has developed. That women should still die from puerperal sepsis or as it is more familiarly called "child bed fever" is a reflection on modern midwifery. It is of course recognised that a certain proportion of the cases are inevitable but one must at the same time admit that many are the result of carelessness on the part of the medical attendant, nurse or midwife.

The question of the adequacy of the facilities provided for the treatment of puerperal fever has received consideration during the year, and it was decided by the Committee to increase the accommodation reserved for such cases at the Seacroft Hospital and to admit not only cases of puerperal sepsis notified as such but also cases of septic abortion and abscess of breast. It has been customary in the past for the Maternity Hospital to undertake the treatment of such cases whether occurring in the wards of that institution or admitted from outside. Owing to the congested condition of the hospital and the great pressure on its bed accommodation, it was thought undesirable that this practice should continue, and on the suggestion of the Ministry of Health an agreement has been arrived at between the Board of the Hospital and the Corporation, whereby all cases whether occurring in the hospital or not, shall be removed to the Fever Hospital for treatment. recognised that this arrangement will seriously interfere with the teaching side of the hospital's work, and in order to compensate for this, a clause has been inserted in the agreement providing for the appointment of a Consultant in Obstetrics on the staff of the Seacroft Hospital. This Consultant will be responsible for the teaching of students and pupil-midwives and for such other work of a consultative nature which might be required in the hospital The arrangement though not ideal, will have the effect of securing the continuity of teaching and at the same time maintaining the connection between the Maternity Hospital and this very important section of obstetrical work.

Further reference to this subject is mentioned on page 126.

A special paragraph on maternal mortality is included in the section Maternity and Child Welfare on page 131.

Encephalitis Lethargica.—Leeds shared in the general epidemic of encephalitis lethargica which occurred throughout the country during the year. There were 41 notifications of the disease received as against 10 in 1923. The number of deaths attributed to the disease was 7, three of which were not notified during life. Of the deaths, four occurred in the Leeds General Infirmary, one in a private nursing home and two at their own homes. Two cases were removed to the Seacroft Hospital for treatment. The distribution of the disease was fairly general all over the City, males and females being attacked in almost equal numbers. The disease was most prevalent

during the second quarter of the year, 34 of them occurring between March and June.

Encephalitis lethargica, popularly and erroneously known as "sleepy sickness," is a disease of comparatively recent discovery. It was first described by a continental observer in 1917 and a year or two later appeared in England. Its importance lies not so much in the fact that it is a killing disease, but that it very frequently causes permanent damage. Blindness, deafness, paralysis of certain groups of muscles, and mental deficiency all follow in its train. So far the etiology of the disease remains obscure though much research by trained investigators all over the world has been done in it. Until the causation has been finally determined nothing much in the way of prevention can be effected. It might be as well however that the public should know that lethargy or sleepiness is by no means an invariable symptom of the disease.

Acute Anterio Polio-Myelitis.—No cases of this disease were notified during the year and there were no deaths.

Cerebral-Spinal Meningitis.—Five cases of this disease were notified and one of them removed to hospital. There were three deaths, one in the Fever Hospital, one in the General Infirmary, and one at home.

Diphtheria.—The number of cases of this disease notified during the year was 289 which is the lowest since 1897. The attack-rate was 0.61 as compared with 0.78 for the previous year and 1.41 for the previous five years. The disease was responsible for 27 deaths, giving a death-rate of 0.06 as compared with 0.04 for the previous year and 0.08 for the previous five years. Of the total cases notified, 268 (or 92.7 per cent.) were removed to hospital. The type continues to be of a comparatively benign order as will be seen by the very low mortality rate. It must be recognised, however, that the disease is one of uncertain virulence and one is never quite sure when it is going to break out in malignant form. Recent research work by an American observer (Schick) has resulted in the discovery of a simple test whereby it can be fairly accurately determined whether the individual is susceptible or not. Should the test prove positive then by means of a special vaccine injected into the body immunity from the disease can be established. The employment of this test in the schools especially those in which diphtheria is endemic might not only reduce the number of cases but bring about its entire . disappearance.

DIPHTHERIA AND MEMBRANOUS CROUP.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate Englandand Wales.
1914	700	1.53	59	0 · 13	0.19
1915	402	0.88	50	0.11	0.12
1916	423	0.95	39	0.09	0.19
1917	549	1.25	60	0 · 14	0.13
1918	542	I·27	47	0.11	0.14
1919	811	I·88	43	0.10	0.13
1920	885	1.97	64	0 · 14	0.12
1921	665	1.43	38	0.08	0.13
1922	470	I.OI	28	0.06	0.11
1923	368	0.78	20	0.04	0.07
1924	289	0.61	27	0.06	0.06

**Enteric Fever.**—The total number of cases notified was 25 and the case-rate 0.05 as compared with 0.02 for the previous year and an average of 0.05 for the previous five years. There were six deaths giving a death-rate of 0.01. Eight cases were removed to hospital.

Malaria.—There were ten cases notified as occurring in the City during the year as compared with four notified in 1923. There was no death from this disease.

Dysentery and Trench Fever.—There were no cases of either of these diseases reported during the year and no deaths.

Ophthalmia Neonatorum.—The number of cases notified was 70, in addition to which six cases were heard of otherwise than by notification, making a total of 76 cases as compared with 89 for the previous year—a decrease of 13. Of the 76 cases 18 (or 23.7 per cent.) occurred in the practices of medical practitioners, 34 (or 44.7 per cent.)

ENTERIC FEVER.

Year.	Cases notified.	Case-rate.	Deaths.	Death-rate. LEEDS.	Death-rate Englandand Wales.
1914	84	0.18	23	0.05	0.05
1915	106	0.23	21	0.05	0.04
1916	48	0.11	9	0.02	0.03
1917	37	0.08	7	0.02	0.03
1918	42	0.10	5	0.01	0.03
1919	33	0.08	8	0.02	0.02
1920	29	0.06	4	0.01	0.01
1921	24	0.05	2	0.00	0.02
1922	14	0.03	7	0.01	0.01
1923	9	0.02	I	0.00	0.01
1924	25	0.05	6	0.01	0.01

Cases of Enteric Fever Month by Month.

Jan.	Feb	March	Aprıl	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
_	4	2	I	3	I	3	I	2	5	I	2

in those of midwives and 24 (or 31.6 per cent.) in institutions, A certain number of the cases, 42 to be exact, were treated at home. and 34 in hospital as in-patients, namely, 21 in the Maternity Hospital, seven in the Township Infirmary and six in the General Infirmary.

As in previous years the district nurses undertook the treatment of a number of cases, twenty-six in all, in their own homes.

#### DAY OF ONSET FROM BIRTH.

1924.	lst	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	10th-15th	15th-20th	20th-25th
No. of Cases	2	4	3	3	3	7	10	5	6	4	16	2	5

The above table does not include six cases heard of otherwise than by notification.

The results of treatment were as follows:

Recovery apparently perfect	• •	64
Recovery not perfect		I
Sight of both eyes affected		
Still under treatment		
Died		2
Result not known owing ro removal	• •	3

It is gratifying to find that the incidence of the disease in institutional practice has fallen to a considerable extent as compared with last year when the figure was abnormally high. There has been a similar though less pronounced drop in the number of cases in the practice of midwives. One hails this evidence of more intelligent and careful midwifery with pleasure and hopes for continued progress in this direction in the coming year.

In addition to the above, 74 cases of discharging eyes were reported by midwives.

Diarrhæa and Enteritis.—Notwithstanding the fact that the year was cold and sunless the number of deaths from diarrhæa and enteritis remained almost as high as for the previous year. In 1923, 118 children under two years of age died of this disease, and last year the number was 103 or 15 less. The death-rate per thousand births for 1924 was 12.0 as compared with 13.6 for the previous year and an average of 14.5 for the previous five years.

It must not be assumed that diarrhœa and enteritis is necessarily a disease of hot weather as can be seen by reference to the table attached. It occurs practically throughout the whole year, though to a greater extent during the summer quarter than in any other period. Food, personal hygiene, the cleanliness of the home, overcrowding, are all very important factors in the causation of the disease, and it is only by improving the general standard of living

that the disease can be brought under control. Dirty food, whether the contamination be derived from careless handling and eating or at the source of production as in the case of milk, is at the bottom of a great deal of the intestinal trouble which one sees in young children, and if parents were more careful in the selection and preparation of food and its storage in the home there would be a rapid decline in the death-rate from this disease. As regards milk, the public have the solution of the problem to a great extent in their own hands. If they insist upon clean milk delivered in sealed bottles, the antiquated milk-can, with all its possibilities for harbouring dirt and germs, would rapidly disappear and with it much of the infantile diarrhœa.

DIARRHŒA AND ENTERITIS DEATHS UNDER TWO YEARS WITH RATES PER 1,000 BIRTHS.

		Poto por To	Dintha
Year.	Deaths.	Rate per 1,0	DOO BILLIS.
I Cal.	Deaths.	Leeds.	England and Wales.
			and wares.
1914	287	26 · 9	21.1
1915	282	28 · 6	18.9
1916	214	22 · 7	13.1
1917	171	22 · 6	12.8
1918	146	19.8	11.7
1919	140	18.5	10.2
1920	140	12.5	8.9
1921	184	18.1	16.1
1922	92	9.9	6.6
1923	118	13.6	8.1
1924	103	12.0	7:3

The 103 deaths from diarrhœa and enteritis were of children aged as follows:—

Under one month		15	6-9	months		25
ı−3 months	• •	9	9-12	months		11
3-6 months	• •	29	I-2	years	• •	14

The incidence of diarrhæa month by month is shown in the following table.

DEATHS AND METEOROLOGICAL CONDITIONS IN EACH MONTH OF YEAR.

1924.	Jan.	Feb.	Mar.	April.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Deaths	I	5	7	5	8	5	5	14	20	22	3	8	103
Barom. (inches)	29.82	29.83	29.77	29.72	29.74	29.88	29.73	29.67	29.73	29.74	29.93	29.68	29.77
Attached Ther.°F	53.58	53.58	54.12	57.85	61.19	64.06	65.69	64.56	63.75	61.48	59 · 38	57.37	59.68
Dry Bulb	41.32	40.35	4 <b>1</b> .c6	47.21	56.10	61.42	63.49	60.86	59.25	53.31	46.73	47.19	51.43
Wet Bulb	39.66	38.42	38.63	43.85	52.60	56.44	58.89	56· <b>7</b> 9	55.67	50.66	44.79	45 · 42	48.42
Humidity	86.26	84.21	80.75	77.26	78.96	72.77	75.29	76.75	78 · 73	82.68	85.98	87.26	80.69
Mn. of highest reading	44.31	43.46	46.79	51.80	60.89	67.11	68.71	65.32	64.46	57.43	50.36	50.40	<b>5</b> 5°79
,, lowest ,,	36.57	<b>35</b> · 93	33.54	39.40	47.68	51.39	54.29	52.11	52.00	47.03	4.2.00	42.43	44.47
" dailv range	7.74	7.53	13.25	12.40	13.51	15.72	14.42	13.51	12.46	10.40	8.36	7.97	11.32
Total rainfall (inches)	2 · 24	1.13	1.04	1.57	3.22	1.64	3.26	1.81	1.98	3.23	1.21	3.23	26.16

The meteorological data are compiled from returns sent us by Mr. Crowther, Curator of the Museum. They are uncorrected readings, made at 10 a.m. and 4 p.m.

Influenza.—There was a recrudescence of this disease during the early part of the vear which greatly increased the death-rate from the disease especially amongst children and old people. total number of deaths registered as due to influenza was 404 and the death-rate 0.86 as compared with 122 deaths in 1923 and a deathrate of 0.26. This is the highest death-rate recorded since 1919. As already stated, the sections of the community most affected were children and old people. Taking the age groups separately, the one with the highest mortality was 45-65, the next in numerical importance 65 and upwards, whilst the third place was shared equally between the 25-45 and 0-5 groups. The total 404 deaths represents 6 per cent. of all the deaths recorded during the year which is higher than for any previous year with the exception of the epidemic years 1918 and 1919.

It has been stated that there is some association between the occurrences of fogs and the incidence of influenza. I have not found this to be the case in Leeds, nor does the disease seem to depend upon any climatic condition except that it appears to be excited by cold sunless weather associated with a humid atmosphere. The disease behaves very much like an ordinary infectious fever. Its infectivity is very high and it is spread from one person to another generally by direct contact, though it may also be contracted by the breathing of air which has become contaminated from an active focus. The control is entirely a personal matter, that is to say the responsibility for its spread rests with the infected individual. If he observes

due care in regard to the disposal of the discharges from his nose and throat, the risk of spread will be greatly minimised if not entirely obviated.

INFLUENZA.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1914	30	0.07	0.19
1915	102	$0\cdot 22$	0.29
1916	65	0 · 15	0.25
1917	59	0.13	0.31
1918	1,401	3.28	3.13
1919	623	1 · 45	I·22
1920	170	0.38	0.28
1921	164	0.35	0.24
1922	169	0.36	0.56
1923	122	0 · 26	0 • 22
1924	404	0 · 86	0.49

AGES AT DEATH FROM INFLUENZA.

1924	0-I	I-2	2-5	5–15	15–25	25–45	45–65	65+	Total.
No. of Deaths	31	24	16	3	14	72	126	118	404

Bronchitis and Pneumonia.—The number of deaths from these two diseases were 643 from the former and 619 from the latter. A total of 1,262 or 18.7 per cent. of the total deaths recorded for the year. Compared with 1923, these figures show a considerable increase and here again as in the case of influenza the increase was most marked at the two extremities of life. Bronchitis and pneumonia are amongst the most fatal conditions which effect young children

and far too little attention is paid to the common cold by the majority of parents who look upon it as an inevitable concomitant of the cold seasons of the year. The common cold or catarrh is often the forerunner of bronchitis and pneumonia and therefore should be treated with respect. It is not a question entirely of clothing nor of conduct in regard to exposure to chills, wet weather, etc., it is far more one of maintaining the general health and avoiding overheated and overcrowded rooms.

#### Bronchitis.

Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1914	539	1 · 18	1.09
1915	738	1.61	I·44
1916	620	1.39	r·25
1917	646	1 · 47	1.25
1918	653	1.53	1.23
1919	741	1.72	I·24
1920	625	1 · 39	1.01
1921	556	1 · 19	0.89
1922	596	1 · 28	1.07
1923	518	1 · 10	0.85
1924	643	1 · 36	

### Ages at Death from Bronchitis.

1924	9-I	I-2	2-5	5–15	15-25	25-45	45–65	65+	Tet 1.
No. of Deaths	82	22	5	4	3	27	157	343	643

Acute primary pneumonia and acute influenzal pneumonia are notifiable, but I am not satisfied that all the cases of these diseases which occur in the City are notified regularly. Last year the number of notifications of acute primary pneumonia received was 982 and of acute influenzal pneumonia 497. Of the former 38 were removed to hospital and of the latter 19. The whole object of notification is to enable us to render help where it is required, that is to say in cases where the nursing facilities are inadequate or where the house is overcrowded or for some other reason unsuitable for the treatment of the cases. Unfortunately we do not hear of such cases soon enough to be able to do much good. It is therefore imperative that medical practitioners should notify all cases and notify early.

PNEUMONIA (ALL FORMS).

			,
Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1914	біо	1:33	1.08
1915	725	1.58	1.36
1916	586	1.31	I·07
1917	565	1.29	1.14
1918	768	1.80	1.65
1919	560	1.30	I·06
1920	622	1.39	0.99
1921	562	1.21	0.92
1922	502	1.08	1.07
1923	440	0.94	o·87
1924	619	1.31	

AGES AT DEATH FROM PNEUMONIA.

1924	0-1	I-2	2-5	5-15	15-25	25-45	45-65	65+	Total
No. of Deaths	183	78	52	17	15	68	104	102	619

CANCER.

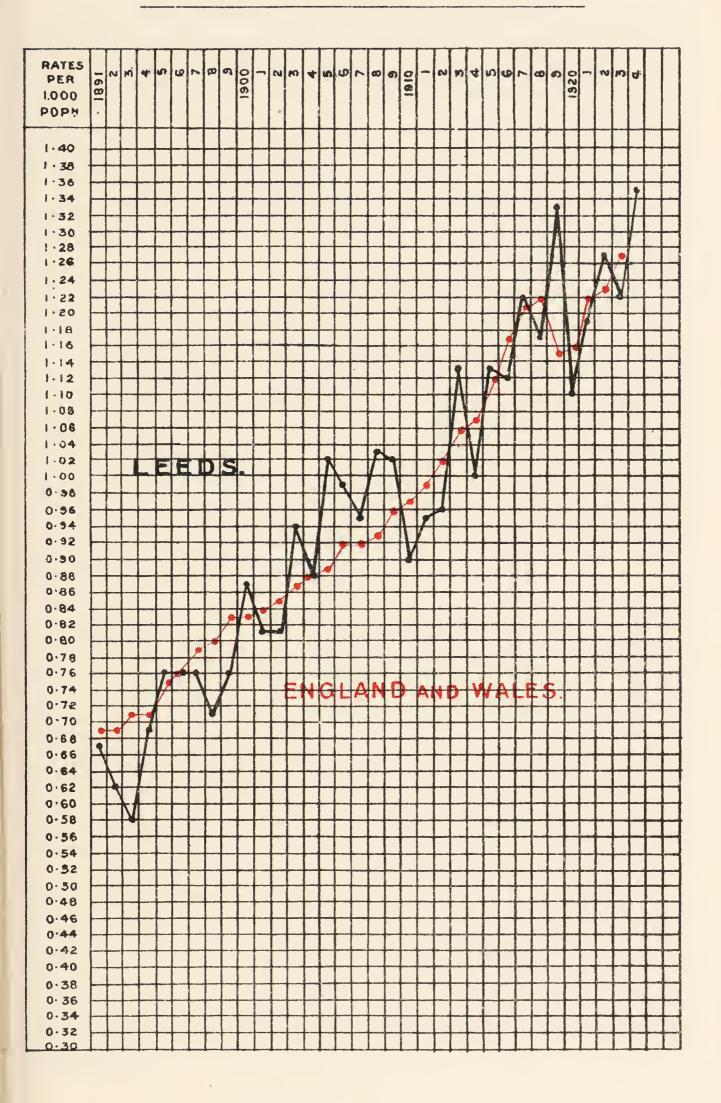
Year.	Deaths.	Death-Rate. LEEDS.	Death-Rate England and Wales.
1914	457	1.00	I·07
1915	521	1 · 13	1.12
1916	500	1 · 12	1.12
1917	535	1 · 22	1.31
1918	500	1 · 17	I·22
1919	575	1.33	1.12
1920	492	1 · 10	1.19
1921	554	1 · 19	I·22
1922	595	1 · 27	1.23
1923	574	1.22	1.27
1924	639	1 · 35	

AGES AT DEATH FROM CANCER.

1924.	0-1	I-2	2-5	5–15	15–25	25-45	45-65	65+	Total.
No. of Deaths	• •		I	2	6	72	328	230	639

Cancer.—The fatality from cancer continues to increase. Last year no fewer than 639 deaths (or 9.5 per cent. of the total deaths recorded) were attributed to it. This is an increase of 65 on the figure for the previous year and gives a death-rate of 1.35 which is the highest rate ever recorded in the City for this disease.

### CANCER DEATH RATE. - 1891 - 1924.





An analysis of the deaths shows that the greatest percentage increase took place between 25 and 45 years of age. The significance of this is that it shows that the disease is extending its influences to the younger age groups. One generally associates cancer with the Autumn of life but there are indications that it is invading the Summer period. Unfortunately, our knowledge of the causation of the disease is so meagre that we can do very little to circumvent its attack. All sorts of theories are abroad but so far no one theory satisfactorily explains the behaviour of the malady. Though one cannot prevent the disease, one can do a considerable amount to limit the damage it does provided always it is tackled in the early stages. Operative interference provides the surest means of cure, and if success following operation falls short of a complete cure, at any rate it prolongs life for a number of years and reduces the amount of suffering. I would, therefore, repeat what has been said so often, that no abnormality in the shape of a sore, swelling or discharge, however slight, occurring in any part of the body after the age of 40 should be lightly regarded. As soon as the individual is aware of such he ought to seek the advice of a competent medical man or woman so that the exact nature of the abnormality may be determined and the appropriate treatment applied.

During the year the Health Committee set up a special Committee representative of all sections of the profession of medicine in the City to enquire into the incidence of the disease in the district and to see whether any information could be gleaned which might be of use in elucidating the causation of the disease and the best methods of tackling it. This Committee has divided itself into two parts, one to deal with the clinical side and the other the publicity. In connection with the former a young medical graduate has been engaged to examine the records of all cases of cancer operated upon in the chief medical institutions in the City. On the completion of the enquiry a report will be presented to the Committee which will then take such steps as may be indicated by the evidence to deal with the problem in the City. The publicity committee will undertake the preparation of special leaflets dealing with the disease for distribution to the public, as well as other methods of propaganda, such as special lectures to men's and women's organisations, press notices, etc.

CANCER DEATH-RATES, ELEVEN LARGE TOWNS, ALSO ENGLAND AND WALES.

			1 1 1 1 1 1								
			Year 1915.		J		Year 1919.				
London	1.16	1.18	1.24	I·24	1.35	1.33	1.25	1.25	1.33	1.33	1.39
Birmingham	1.05	0.92	1.04	1.06	1.06	1.03	1.09	1.11	1.10	1.16	1.18
Liverpool	0.99	1.05	1.01	1.11	1.08	1.10	1.03	1.07	1.10	1.06	1.13
Manchester	0.99	1.03	1.12	1.18	1.19	1.24	1.17	1.28	1.28	1.29	1.41
Sheffield	0.90	0.93	0.91	1.08	1.03	1.06	0.97	1.08	1.17	1.18	1.19
Leeds	1 · 16	1.04	1 · 19	1 · 16	1 · 29	1 · 19	1.35	1.09	1 · 19	1.29	1.24
Bristol	1.06	1.20	1.20	1.12	1.24	1.30	1.18	1.15	1.26	1.31	1.32
Hull	0.92	1.03	1.05	1.11	1.26	1.17	1.15	0.97	1.21	1.21	I·04
Bradford	1.23	1.31	I · 22	1.36	1.46	1.45	1.38	1.28	1.39	1.49	1.33
Newcastle	0.96	1.01	0.97	1.00	0.97	0.87	1.13	0.94	1.10	1.08	1.10
Nottingham	1.20	1.04	1.11	1.09	1.27	1.52	1.23	1.36	1.43	1.23	1.46
England and Wales	1.06	1.07	1.12	1.17	1.21	I · 22	1.12	1.16	I • 22	1.23	1 · 27

The rates are calculated from figures given in the Registrar General's Annual Reports.

Overcrowding and Disease.—It is interesting to note the relationship between overcrowding and the incidence of infectious disease. I have had enquiries made with a view to eliciting whether there was any connection between the two. The result of these enquiries are given in the accompanying table from which it will be seen that in scarlet fever out of a total of 1,256 cases 288 (or 23 per cent.) occurred in overcrowded dwellings, whilst of 289 cases of diphtheria 109 (or 38 per cent.) occurred in similar circumstances. I do not wish to minimise the evil effects of overcrowding which are indisputable but it is necessary to correct the impression that seems to prevail in the public mind that the principal factor in the causation of infectious disease is overcrowding.

Infectious Disease Cases notified during 1924, in Overcrowded Houses, and in Houses in which more than one Family are Living.

Disease.	Total Cases Notified.	*Cases notified in overcrowded houses.	Cases notified in houses in which more than one family are living
Scarlet Fever Diphtheria Enteric Fever Erysipelas	1,256	288 or 23%	101 or 8%
	289	109 or 38%	28 or 10%
	25	6 or 24%	1 or 4%
	237	52 or 22%	12 or 5%

<sup>\*</sup> Over two persons to one sleeping room, two children under 10 years of age counted as one person.

#### INFECTIOUS DISEASES HOSPITAL.

Particulars of the work of the hospital for the year are set out in the table on page 27.

#### AMBULANCE WORK AND DISINFECTION.

Ambulances.—In the report for 1923 I mentioned that the purchase of a special ambulance for the removal of maternity cases was under consideration. That ambulance was commissioned in June and the fact that from the date of its commission to the end of the year no fewer than 144 cases had been removed to one or other of the lying-in institutions proves how much such facilities were needed and how greatly they have been appreciated.

Certain of the ambulances engaged in the removal of infectious cases are becoming worn out and will have to be replaced during the coming year. It is a matter for regret that it has not been possible to effect one replacement during the year under review but the claims of maternity were deemed so urgent as to demand preference.

As compared with the previous year the number of cases removed by the fever ambulances was 2,074, a decrease of 637 on the figure for the previous year.

In addition to which six cases of tuberculosis were removed to Armley House Sanatorium and 24 other cases from the Fever Hospital and Killingbeck Sanatorium to their own homes or to other institutions; over and above these 43 other journeys were made.

Details of the cases removed to hospitals and lying-in institutions by the ambulances appear in the sub-table:—

Smallpox	• •	 	• •		8
Scarlet Fever		 			1,187
Diphtheria		 			346
Measles		 			99
Typhoid Fever		 	• •		19
Tuberculosis	• •	 	• •	• •	201
Other diseases	• •	 	• •		214
Maternity	• •	 	• •		144
				_	
Тот	AL	 	• •		2,218

The total mileage run by the four ambulances was 22,686.

**Disintection.**—The following work was done by the Disinfecting Staff:—

Houses disinfected		2,384
Rooms disinfected	• • • • •	6,356
Beds and mattresses disinfed	eted	3,053
Articles of bed clothing disir	nfected	17,608
Articles of wearing apparel of	disinfecte	d 32,622
Miscellaneous articles disinfe	cted	9,747

Also 367 infected persons or contacts went, or were taken to one or other of the sanitary depots to have a disinfecting bath and disinfection of clothing carried out.

The total mileage run by the three bedding vans was 21,334.

At the Sanitary Laundry in Stanley Road, 81,675 articles of bedding, clothing, etc., have been washed and disinfected.

During the year, the disinfectors at both stations have been overhauled. After continued usage, in one case for 20 and the other 35 years it was found that many of the parts had become worn out and required renewal. In the case of one of the disinfectors, that at Beckett Street, the jacket of the chamber was in such a state as to be practically useless, and as the appliance had been made by a firm which had since gone out of existence it appeared as though the whole apparatus would have to be scrapped and a new one bought. Fortunately, a local firm offered to provide a new jacket at a reasonable cost. The offer was accepted and the work has been completed with entirely satisfactory results.

#### BACTERIOLOGICAL WORK.

The following is a complete summary of the work done for the Health Department by the Department of Pathology and Bacteriology in the Leeds University Medical School, under the supervision of Professor James W. McLeod, the City Bacteriologist.

### GENERAL.

NATURE OF TEST.	Number of Tests.
Swabs for diphtheria bacilli	I,156 I,275 I 2 I 4 3 2 I I 1 4 7 12 67 50 4 I 2
Total	 2,594

Work done in the Department of Pathology and Bacteriology of the University of Leeds in connection with the V.D. Regulations.

-	Nature of T	EST.				Number of Tests.
	For detection of spirochetes— for treatment centre for practitioners for institutions	• •	• •		• •	26 2 5
	For detection of gonococci— for treatment centre for practitioners for institutions					748 107 200
	For Wassermann reaction— for treatment centre for practitioners for institutions		• •	• •		2,800 178 1,265
	Other examinations— for treatment centre for practitioners	• •	• •	• •	• •	209 •• 5
-	Total	4 0	• •	• •	• •	5,545

#### VENEREAL DISEASES.

There were 34 deaths certified during the year as due to syphilis. Of these, 27 were children under one year of age, 19 males and 8 females; two were females between 1 and 5 years; one, a female between 15 and 25, and four, two males and two females, between 45 and 65.

Work of the Treatment Centre.—There was an increase in the number of new cases registered at the Centre at the Leeds General Infirmary during the year as compared with the previous year, namely, female syphilis 4·3 per cent.; male gonorrhæa 21·2 per cent.; female gonorrhæa 66·1 per cent.; female other diseases not venereal 5·7 per cent. and a reduction of male syphilis, 12·3 per cent. and male other diseases not venereal 2·2 per cent. The percentage increase in the Leeds new cases registered during the year were male syphilis, 3·1 per cent.; female syphilis, 2·6 per cent.; male gonorrhæa, 22·8 per cent.; female gonorrhæa 89·4 per cent.; male other diseases not venereal, 4·9 per cent; and a reduction in female other diseases not venereal of 39·1 per cent.

It will be noticed that the most marked increases were in the number of new Leeds cases of gonorrhoea both male and female. One has always had the impression, rightly or wrongly, that the number of cases of gonorrhœa attending the centre was smaller than it ought to be especially so with regard to females. The increase has probably been brought about by the knowledge of the existence of the centre having become more general and the fact that the disease is very often of long duration and requires special treatment which cannot be readily applied at home.

The total attendances of all cases were 45,591 and of Leeds cases, 39,510, as against 29,661 and 22,156 respectively for the previous year.

Of all cases 598 (or 8.4 per cent.) ceased to attend before completion of treatment, which is slightly higher than for the previous year when the figure was 537 (or 8.0 per cent.).

Persons Treated at the General Infirmary, Leeds. (Local treatment centre).

	Year		Year	1924.	Incre decr	ase or
	М.					
Syphilis first cases . Soft chancre ,,	415	F. 210  62	M. 329  503 136	F. 219  103	M. - 46 .: + 88 - 3	F. + 9  + 41 + 2
Total	929	307	968	3 <b>5</b> 9	+ 39	+ 52
Total attendances of all cases Aggregate No. o In-patient days No. of doses of Salvarsan substitutes  Pathological specimens examin Spirochetes Gonococci Other organisms Blood—Wassermann reaction	i 11,0	228	8	591 62 273 35 389 247	- I, + + +	166

# LEEDS PATIENTS

	Year	1923.	Year	1924.		ase or
Syphilis first cases Soft chancre ,, Gonorrhœa ,, Other diseases, not Venereal ,	M. 258 342	F. 153 47	M. 266  420	F. 157  89	M. + 8  + 78 + 5	F. + 4  + 42
Total	703	246	794	274		+ 28
Total attendances of all cases Aggregate No. of In-patient days		156 181 704	39,5 6,9	53		354 128 792
Pathological specimens examine Spirochetes	3	23 393 142 385	2	26 748 209	+ + -	3 355 67 85

LEEDS GENERAL INFIRMARY (LOCAL TREATMENT CENTRE).

801
327
<b>5</b> 98
41
452
°37

The increase in the number of cases attending at the Centre for treatment, though slight, was nevertheless an indication that there is still a good deal of venereal infection about. This must not be taken as meaning that the amount of infection is any greater in the aggregate than for the previous year, because, in the absence of any means of determining the actual incidence of these diseases, it is not possible to estimate the number of infected persons in the City. The higher figure may simply mean that a larger number took advantage of the facilities for treatment offered by the Centre, and this of course is exactly what the Centre exists for, and the greater the number who attend the more perfectly is the Centre fulfilling the function for which it was established. That so many discontinue attendance before treatment is completed is to be deplored, as much for the sake of the community as for their own sake, besides which it entails the waste of a considerable amount of public money. How to prevent such defaulting is one of the problems which calls for solution at the present time. Fortunately Leeds has a smaller number of defaulters than many other areas. The only way of effectually preventing defaulting would seem to be by the introduction of a law making attendance at a Centre compulsory until completion of the treatment. The objection to such a measure is that it might have the effect of frightening patients away rather than encouraging them to seek treatment.

Arrangements were completed with the Board of Guardians of the Leeds, Holbeck and Bramley Unions during the year, whereby the services of Dr. J. B. Bibby, the Venereal Diseases Officer, will be available on request by the medical officers of these Institutions, in cases where the advice of an expert is required. Exchange of information between the medical officers of the Union Infirmaries and those of the V.D. centre will also be made easier. The effect of

the arrangement will be to link up the centre with all the institutions in the City providing treatment for venereal infections thus rendering the scheme more complete. The personnel of the Centre was increased during the year by the appointment of a whole-time Assistant Medical Officer, a part-time female Assistant Medical Officer and a trained male attendant. With this increase of staff it will be possible to augment the number of clinics and give more individual attention to the cases. It is hoped in the near future to establish special Clinics for mothers and babies at the Infant Welfare Centres at which a member of the medical staff of the V.D. Centre will attend and examine cases referred by the Infant Welfare Medical Officers for advice and treatment.

Institutions.—The number of in-patients in receipt of treatment at the Maternity Hospital declined from 98 in 1923 to 37 whilst the new cases fell from 92 to 35 and the in-patient days from 1,655 to 343. The in-patient days at the Leeds General Infirmary dropped from 228 in 1923 to 62 in 1924.

This fall in the number of in-patients is not surprising as the majority of those requiring treatment can be dealt with better as out-patients. The man or woman who contracts venereal disease is naturally anxious to conceal the fact from his neighbours but if he or she has to be confined to bed in a public institution, concealment becomes difficult or impossible in addition to which the majority are not in a position to accept in-patient treatment which might mean not only loss of wages but also of employment.

The number of cases treated in the Hope Hospital during the year was 40 as against 50 for the previous year. The new cases fell from 34 to 28 and the in-patient days from 5,531 to 4,732.

The facilities provided at this hospital are not taken advantage of as they might be. This is probably due to lack of knowledge on the part of social workers both in Leeds and other areas of the West Riding, that such a hospital exists. The work done by the hospital on behalf of the homeless and friendless girl is admirable and the result achieved in the past has been most encouraging. Now that the whole scheme for the treatment of venereal diseases in Leeds has been unified and consolidated it is hoped that the institution will be taken advantage of to a much greater extent.

Further particulars of the cases admitted to and treated in the Maternity and Hope Hospitals are given on the opposite page.

Ophthalmia neonatorum is dealt with on page 70.

MATERNITY HOSPITAL, 42, HYDE TERRACE.

	Cases in residence on Dec. 29th, 1923.	Cases admitted.	Cases discharged.	Cases in residence on Jan. 3rd,
Syphilis Gonorrhœa .		23 5	<sup>25</sup> 5	
Syphilis and Gonorrhœa. Other disease.		7	6	I ••
Total .	, 2	35	36	I

In addition to the above the following attended for the first time and were treated as out-patients, namely, syphilis, 15; gonorrhœa, 4; and syphilis and gonorrhœa, 2. The total attendances made by these out-patients were 400.

HOPE HOSPITAL, 126, CHAPELTOWN ROAD.

		Cases in residence on Dec. 29th,	Cases admitted.	Cases discharged.	Cases in residence on Jan. 3rd, 1925.
			6(+ 3) 19(+12)	5(+ 3) 19(+10)	2 10(+4)
Gonorrhœa Other disease	• •		3	1 3	• •
Total		12(+2)	28(+15)	28(+13)	12(+4)

Total days in residence ... .. 4,372(+1,718)

No. of doses of Salvarsan substitute ... 69

Pathological specimens examined:—
Spirochetes ... ... ... ... ... ... ... ... ... 97
Other organisms ... ... ... ... ... ... 7

Of the 28 women admitted, 15 had babies shown in the above table in brackets.

Supply of Salvarsan Substitutes.—The number of medical practitioners in the area qualified to receive free supplies of salvarsan substitutes up to the end of the year was 43. The amount of salvarsan substitutes distributed to practitioners was 754 doses, a decrease of 812 under the figure for 1923.

Pathological Work.—The extent to which practitioners have availed themselves of the facilities for pathological examinations provided by the Council is shown on page 84.

Education and Propaganda.—The Leeds Branch of the National Council for Combating Venereal Diseases has continued its activities throughout the year with unabated vigour. The full Branch has met once and the Executive Committee on seven occasions. Delegates from the Branch have taken part in several conferences in London at which important matters of policy were discussed.

During the Health and Baby Week in October a series of film lectures dealing with the various aspects of social hygiene were given to audiences in various parts of the City in addition to which addresses on the subject were given to Social Organisations and to workpeople at various works. Altogether over 4,000 people attended these lectures and film demonstrations. Mr. T. Bowen Partington, of the N.C.C.V.D., was the lecturer.

The film as a means of popular education has now become firmly established in this country. It portrays in a more vivid and interesting manner, than is possible by word of mouth alone, the causes and effects of disease and leaves a more permanent impression on the mind of the audience.

#### TUBERCULOSIS.

Since writing my last report in which appeared certain proposals for the reorganisation of the tuberculosis work in the City, the National Health Insurance Committee has vacated the room on the first floor of the Tuberculosis Dispensary. This will enable the interior of the Dispensary to be entirely remodelled. At the time of writing alterations are in progress and when these have been completed the Dispensary will be able to fulfil its function and play a more useful part in the general scheme.

The medical personnel has been increased by the appointment of a whole-time Clinical Tuberculosis Officer, and, it is hoped, as soon as the alterations to the building are completed to restore the nursing service to its former numerical strength by the appointment of nurses to fill two vacancies which were left unfilled at the time of the resignation of their former occupants. As a result of these changes it is anticipated that the volume of work will increase, and that it will be possible to devote more time to more specialised forms of treatment, e.g., X-ray, artificial sunlight, pneumo-thorax, etc. That the Dispensary is the hub of the whole scheme cannot be too strongly emphasised, and at this critical stage in its evolution care should be exercised to see that nothing is done which might jeopardise success or retard progress. A false move might mean the complete undoing of the plans which have been the subject of anxious thought for many years. What is done now, is done for good and can never be undone. The aim should be to make the Dispensary worthy in every respect of a City of the size and importance of Leeds.

The Dispensary after remodelling will include an up-to-date X-ray plant installation for treatment by artificial sunlight, a dental department, additional consulting room and operating room on the ground floor, and on the first floor, medical officer's rooms, offices for the nursing and clerical staff together with a staff retiring room which can also be used as a Committee room.

With regard to the institutional side of the work this has gone on with undiminished vigour throughout the year.

The Old Hall at Killingbeck which has stood empty since 1918, has been reconstructed, and will shortly be opened as a home for maids and porters engaged in the institution. This will set free the ward which for several years has been utilised as a maids' dormitory,

and incidentally it will also increase the facilities for recreation for the women patients at Old Killingbeck which are at present very much restricted.

The "Hollies," Weetwood, will shortly be opened for the treatment of children with early signs of the disease of a non-infective type. The building has been entirely renovated, and situated as it is, in the healthiest part of the City amongst beautiful surroundings, ought to prove a most valuable addition to the scheme. It is unfortunate that the capacity of the institution is so limited, but with careful selection of the cases good results should be obtained. Cases for admission to the institution will be selected by the medical staff of the Dispensary in conjunction with the School Medical Officer.

The total accommodation at all the institutions for all forms of tuberculosis at December 31st, 1924, was:—

		Males.	Females.	(	Children.	Total.
Killingbeck	• •	88	 78		54	 220
Gateforth		38	 12		-	 50

As regards the new Sanatorium which has been alluded to in several of my previous reports I regret to say no further progress has been made. There is a probability that, owing to the demand for building sites in that locality, the site in King Lane acquired in 1920 may have to be abandoned and a new site found. It will be difficult to get another site within the City boundary as all the land available and suitable for the purpose has been earmarked for housing or road development. Wherever the site ultimately selected be situated there should be no further delay in getting on with this part of the Scheme. The provision of Sanatorium accommodation for women and children is one of extreme urgency.

An attempt has been made during the year, in conjunction with the Tuberculosis Ex-Service Men's Society, to formulate a scheme for providing employment for cases in which the disease has been cured or arrested but which for some reason or other are unable to continue in their own occupation. So far nothing of a concrete nature has resulted from these negotiations which are still being continued. It is not for lack of effort or desire to see such a scheme brought into being at the earliest possible moment, that progress has been so slow. The great difficulty is finance, and in a matter of this kind where so much depends upon the financial side, it would be foolish to go forward with this difficulty unsolved. I am as convinced as ever that no scheme for the treatment of tuberculosis

can be considered complete which does not include adequate provision for the employment in useful industries of cases sufficiently recovered to undertake physical exertion without risk to their health. It is not sufficient merely to bring about the arrest or cure of the disease or even to effect an improvement in the general condition of health. An attempt should be made to find suitable remunerative employment, under favourable conditions, to which men or women can turn when treatment is complete or near completion. I would even go further and say that employment should be looked upon as part of treatment, in my opinion, not the least important part and funds should be available for the purpose just as they are for Dispensary or Sanatorium treatment. Industry steadily refuses to reabsorb the tuberculous subject who is thereby driven to seek employment in trades which are wholly unsuitable and even frankly inimical to his health, or as an alternative, to idle away his time at home, a burden to himself and his family and a menace to his If Sanatorium treatment is to yield better results in the future than it has in the past, it must be definitely linked up with a properly organised employment scheme.

Statistics.—During the year 1,191 cases of pulmonary and 180 of non-pulmonary tuberculosis were notified, making a total of 1,371 cases. Of these, 743 were males and 628 females. Compared with the previous year, this is an increase of 189 in the number of notifications of pulmonary tuberculosis and a decrease of 17 in the number of non-pulmonary tuberculosis and compared with the average for the previous five years an increase of 245 in pulmonary tuberculosis and a decrease of 24 in non-pulmonary tuberculosis. Of the cases notified during 1924, 1,253 were by medical practitioners, five by school medical officers, whilst 113 came from institutions.

The number of cases of pulmonary tuberculosis not heard of until the time of death was 84 which is a decrease of 28 on the figure for the previous year, or put in another way, of the total number of deaths from pulmonary tuberculosis which occurred during the year all but 84 (or 16·4 per cent.) had been previously notified to the Public Health Department and the non-pulmonary cases not heard of 81 (or 56·2 per cent.). Though the number of unnotified cases of pulmonary tuberculosis is slightly reduced as compared with last year, it is still much too high. As regards the non-pulmonary type, the position is a great deal worse, 56 per cent. of the total deaths being unnotified.

The following tables show the number of notifications of tuberculosis received during the year.

### PULMONARY.

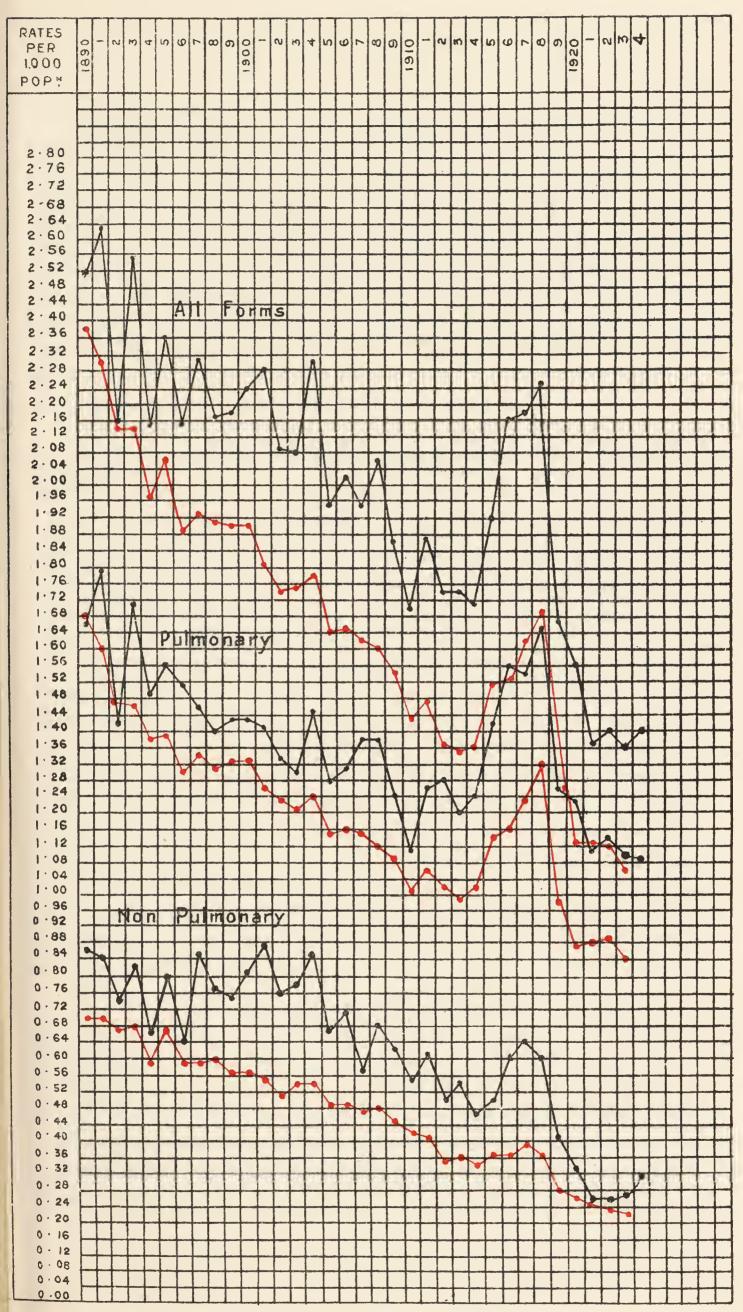
Ages.		I-5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males	I	20	102	122	119	123	107	37	27	658
Females		7	91	145	143	86	42	9	10	<b>5</b> 33
Totals	I	27	193	267	262	209	149	46	37	1191

### Non-Pulmonary.

Ages.		<i>I</i> -5	5-15	15-25	25-35	35-45	45-55	55-65	65+	Total.
Males	2	22	34	ΙΙ	4	IO	2			85
Females	3	22	37	17	II		3	2		95
Totals	5	44	71	28	15	10	5	2		180

### TUBERCULOSIS.

-	1	)						1					
				DEAT	THS.			NOTIFICATIONS.					
YE	EAR.	Pulmonary pulmons tuberculosis.		onary	All forms tuberculosis.		Pulmonary tuberculosis.		Ne pulmo tubero	nary	All forms tuberculosis.		
		Deaths.	Death- rate.	Deaths.	Death- rate.	Deaths.	Death- rate.	Cases.	Case-	Cases.	Case- rate.	Cases.	Case-
19	914	569	1.24	213	0.47	782	1.71	1,310	2 · 86	307	0.67	1,617	3.53
19	915	651	1.42	230	0.50	881	I · 92	1,068	2.33	312	0.68	1,380	3.01
19	916	695	1.56	268	0.60	963	2.16	1,029	2.31	320	0.72	1,349	3.03
19	917	674	1.24	280	0.64	954	2.18	1,081	2.47	336	0.77	1417,	3.24
19	816	705	1.65	257	0.60	962	2.25	1,238	2.90	241	0.56	1,479	3.46
19	919	542	1.26	177	0.41	719	1.67	1,076	2.50	208	0.48	1,284	2.98
19	920	552	1.23	146	0.33	698	1.56	962	2.14	209	0.47	1,171	2.61
19	21	519	1.11	122	0.26	641	1.37	867	ı·86	234	0.50	1,101	2.36
19	22	533	1.14	120	0.26	653	1.40	824	I·77	172	0.34	996	2 14
19	23	515	1.10	122	0.26	637	1.36	1,002	2.13	197	0.42	1,199	2.55
19	24	<b>51</b> 3	1.09	144	0.31	657	1.40	1,191	2.53	180	0.38	1,371	2.91



ENGLAND AND WALES - RED.



A special circular issued by the Ministry of Health in December drew attention to this very important matter and urged local authorities to put into operation the powers they possess to enforce regular notification. Since the receipt of this circular the practice has been adopted of sending a letter to defaulting medical practitioners in the City, directing their attention to the obligation imposed upon them by the Tuberculosis Regulations 1912 and 1921, to notify all cases of tuberculosis occurring in their practices forthwith to the Medical Officer of Health. The issue of this letter has been followed by an immediate improvement in the number of notifications received an improvement which I trust will be sustained.

An analysis of the notifications in age groups will be found in table on page 94.

The total deaths from tuberculosis of all types during the year numbered 657 of which 364 were males and 293 females. Compared with the previous year, these figures represent an increase of 20 on the total deaths and a decrease of 13 on the average of the previous five years. Pulmonary tuberculosis accounted for 513 (or 78.1 per cent.) of the total deaths from tuberculosis and nonpulmonary 144 (or 21.9 per cent.). The death-rate from pulmonary tuberculosis was 1.09 per thousand of the population and from non-pulmonary 0.31, making a total death-rate from all forms of the disease of 1.40. With the exception of that for pulmonary tuberculosis these rates are higher than for the previous year, the corresponding figures for 1923 being pulmonary, 1·10; nonpulmonary, 0.26; total, 1.36. Compared with the average rates for the previous five years, namely, pulmonary, 1.17; non-pulmonary, 0.30; total, 1.47, there was a decrease in the pulmonary of 0.08, the non-pulmonary remained practically the same and there was a fall in the total of 0.07.

The year was certainly one which favoured the spread of tuberculosis, the long winter with backward spring and the sunless summer and autumn with the accompanying crop of respiratory complaints was almost bound to result in an increase in the incidence of the disease. That the death-rate did not increase is somewhat surprising because usually in a year when influenza is present in epidemic form as it was in the first quarter of 1924 there is a corresponding increase in the mortality from pulmonary tuberculosis.

It is gratifying and encouraging to find that there was no such increase. As regards the non-pulmonary type the increase was so small as to be almost negligible.

The fact which emerges from these comparisons, and I have called attention to the same point in previous annual reports, is that the disease in Leeds notwithstanding all our efforts to eradicate it still maintains its ground. It would be wrong to say that no progress has been made but it is slow and only moves by fractions. Judged by the number of notifications one might be led to think that the disease actually increased its hold in 1924, but the increase is more apparent than real and is probably explained by the greater care on the part of medical practitioners to notify cases—the result of the special letter sent out by the Ministry of Health. At the same time it does emphasise the need for taking further and more effective steps to deal with the problem in this area.

Undoubtedly much of the disease is attributable to the conditions in which the people are living. Bad housing, overcrowding, shortage of food caused by unemployment, all have the effect of impairing the defences of the body and preparing the way for invasion by the tubercle bacilli. Until better times arrive when we can hope to eliminate these unfavourable circumstances our efforts must to a certain extent be futile, but much could be done to improve the situation by better organisation of the forces at our disposal. Such re-organisation is in progress at the present time, and the important question of a new sanatorium for women and children is engaging the attention of the Committee. Until the sanatorium accommodation especially for children is increased we cannot hope for a great improvement in the results. I would reiterate the need for pressing forward with this part of the 1918 scheme.

An analysis of the deaths in each group is shown on page 97 and the distribution of deaths from pulmonary tuberculosis in the various wards in the City on page 101.

# PULMONARY TUBERCULOSIS.

### Ages at Death.

1924.	-5	5-10	10-15	15-20	20-25	25-45	45-65	65+	Total.
Males	9	2	6	24	<b>2</b> 6	114	99	21	301
Females	6	8	7	30	28	91	39	3	212
TOTALS	15	10	13	54	54	205	138	24	513

# Non-Pulmonary Tuberculosis. Deaths.

	1924.		Tubercular meningitis.	Abdomin- al.	Bones and Joints.	Other tuber- culosis.	Total.
	Males Females	• •	<b>2</b> 6	11 21	8	18 17	63 81
7	Totals		61	32	16	35	144

# Ages at Death.

1924.	<u>-5</u>	5-10	10-15	15-20	20-25	25-45	45–65	65+	Total.
Males		4 3	<b>5</b>	3	4 6	11	7 3		63 81
Totals	65	7	13	13	10	22	Io	4	144

The housing conditions of 1,313 of the 1,371 cases of tuberculosis (all forms) notified, are shown in the table subtended:---

Rooms in house.	Through house.	Percentage of total throughs.	Back-to- back house.	Percentage of total back-to-back.	Percentage of total cases.
ı room	2	0.6	• •	• •	0.2
2 rooms	4	I·2	214	21.7	16.6
3 rooms	31	9.2	409	41.4	33.2
4 rooms	62	19.1	275	27.8	25.7
5 rooms	103	31.7	56	5.7	12.1
6 rooms	68	20.9	28	2.8	7.3
7 or more rooms	55	16.9	6	0.6	4.6
Total	325	100.0	988	100.0	100.0

In addition to the 325 through houses and 988 back-to-back houses, there were 49 cases notified from common lodging houses, etc., and nine that could not be traced, making a total of 1,371 cases of all forms of tuberculosis notified during the year.

The sub-joined table indicates the type of house occupied by 198 persons who were notified during 1924 as suffering from tuberculosis of all forms and who died during the year:—

Rooms in house.	Through house.	Percentage of total throughs.	Back-to- back house.	Percentage of total back-to-back.	Percentage of total deaths.
I room	I	2.0		• •	0.5
2 rooms	2	3.9	40	27.2	21.2
3 rooms	5	9.8	60	40.8	32.8
4 rooms	8	15.7	34	23.1	21.2
5 rooms	22	43.1	8	5.4	15.2
6 rooms	9	17.6	4	2.7	6.6
7 or more rooms	4	7.8	I	0.7	2.5
Total	51	100.0	147	100.0	100.0

In addition to 51 through houses and 147 back-to-back houses, there were 18 deaths in which the home address was given as common lodging houses, etc.

Deaths from all forms of Tuberculosis in 1924 with year of Notification.

Year of Notification,			No. dying in 1924.	Percentage of total deaths.	
1905		• •	I	0.3	
1911	• •	• •	5	0.8	
1912	• •	• •	8	I·2	
1913		• •	8	1.2	
1914		• •	7	1.1	
1915		• •	4	0.6	
1916	• •		4	0.6	
1917			10	1.2	
1918			9	1.4	
1919	• •		12	1.8	
1920	• •		17	2.6	
1921	• •		16	2.4	
1922	• •		44	6.7	
1923	• •		109	16.6	
1924	• •	• •	216	32.9	
Not notified			165	25·1	
Died outside City			22	3.3	
Total .			657	100.0	

Notifications and Deaths from all forms of Tuberculosis occurring in 1924 classified according to Occupation.

Occupation.		Notif	ications.	Deaths.	
		Number.	Percentage of total Notifications.	Number.	Percentage of total deaths.
Textile Workers		248	18.1	103	15.7
Leather "		41	3.0	20	3.0
Metal "		93	6.8	59	9.0
Coal "		41	3.0	22	3.3
Stone "		14	1.0	3	0.4
Wood "		13	0.9	7	1.1
Other dusty Trades		70	5.1	42	6.4
Printers		27	2.0	12	1.8
Clerks, Typists, etc.	• •	40	2.9	27	4.1
House Workers		186	13.6	103	15.7
Nurses		9	0.7	5	0.8
Food Trades, etc.		44	3.2	15	2.3
Labourers	• •	56	4.1	34	5.2
Out-door Workers	•	60	4.4	28	4.3
Various	• •	74	5.4	. 31	4.7
School Age	• •	266	19.4	46	7.0
Infants	• •	72	5.2	80	12.2
No Occupation		13	0.9	20	3.0
No Trace	• •	4	0.3		
Total	• •	1,371	100.0	657	100.0

PULMONARY TUBERCULOSIS. DEATHS IN WARDS.

Ward.	Deaths.	Rate per 1000 Population.	Ward.	Deaths.	Rate per 1000 Population.
Central	20	1.57	Mill Hill	9	1.70
North	4 <b>I</b>	0.95	West	30	1.35
North-East	55	1 · 49	North-West	40	1.26
New Ward*	3	0.33	Brunswick	18	0.75
East	74	2.05	New Wortley	21	1.16
South	17	1 · 31	Armley and Wortley	30	0.80
East Hunslet†	37	0.98	Bramley	19	0.77
West Hunslet	27	0.74	Headingley	40	0.76
Holbeck	32	1 · 07	Total	513	1.09

<sup>\*</sup>Roundhay, Seacroft, Shadwell, and Crossgates.

<sup>†</sup>Including Middleton.

Institutional Treatment.—Details of the cases admitted to the three Sanatoria, Killingbeck, Gateforth and Armley House, are given in the tables on pages 103, 106, and 108.

Killingbeck.—The Medical Superintendent, Dr. W. A. Todd, writes:—

"During the year ended 3rd January, 1925, the total number of cases treated in the institution was 1,060, comprising 476 males, 365 females and 219 children as compared with 895 made up of 471 males, 247 females and 177 children for the previous year. Of the total, 318 were ex-Service men.

"All types of the disease were admitted but pulmonary cases predominated, there being 984 of this type as against 76 of the nonpulmonary.

"The accommodation was increased on April 1st, 1924, from 168 beds to 220 beds, by the addition of 52 beds. This was occasioned by the closure of Armley House.

"The conduct of the patients continues to be very satisfactory."

"A school for the children patients was opened in November and Mrs. D. Barrand was appointed teacher. So far the venture has proved a great success, the improvement in the physical and mental condition of the children being quite remarkable. The children go to school happily and appear reluctant to leave after lessons.

"It is hoped to institute Handicrafts for the men and women patients this year. This, I think is a move in the right direction and will do as much for the adults as the school has for the children. Idleness breeds discontent but with something to occupy their minds and bodies they will find an outlet for those energies which life in sanatorium keeps shut up and happiness and contentment will follow.

"The number of pneumo-thorax injections was 78.

"I should like to reiterate what I said in my report for 1923 that to bring the sanatorium up to date the following are required:—

"(1) An X-ray outfit.

"(2) A dental room and equipment.

"(3) A small surgical theatre and plaster room."

Killingbeck.

# Pulmonary Tuberculosis for Year ended 3RD January, 1925.

Killingbeck	Ma	les.	Fem	Total.	
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 29th, 1923.	14	76	15	35	140
Admitted	72	386	<b>7</b> 8	308	844
Discharged	69	345	64	253	731
Died	2	36	3	<b>2</b> 9	70
Remaining Jan. 3rd, 1925	15	81	26	6 <b>1</b>	183

Average length of stay, 87 days.

## Analysis of Cases Discharged.

Killingbeck Sanatopium.		Ma	les.	Fen	Total.	
		Under 15	Over 15	Under 15	Over 15	
Disease arrested	• •	42	80	41	32	195
,, improved	• •	22	194	18	180	<b>41</b> 4
,, not improv	ed	5	71	5	41	122
Totals		69	345	64	253	731

Restoration	of working capacity	Males.	Females.	Total.	
	ent. approximately	• •	76	28	104
80 ,,	,,	• •	68	35	103
60 ,,	- ,,	• •	59	95	154
40 ,,	,,	• •	<b>2</b> 6	19	45
. 20 ,,	,,	• •	41	32	73
10 ,,	,,		4	3	7
	Totals	• •	<b>2</b> 74	212	486

# Non-Pulmonary Tuberculosis for Year ended 3rd January, 1925.

Killingbeck	Mal	les.	Fem	Total.	
SANATORIUM.	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 29th, 1923	• •	3	12	• •	15
Admitted	16	11	12	22	61
Discharged	12	9	15	12	<b>4</b> 8
Died				2	2
Remaining Jan. 3rd, 1925	4	5	9	8	26

Average length of stay, 115 days.

Killingbeck	Mal	les.	Fem	Total.	
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Disease arrested	4	2	5	• •	11
,, improved	8	6	9	10	33
,, not improved		I	I	2	4
Totals	12	9	15	12	48

Restorați	on of v	vorking capacity—	Males.	Females.	Total.	
Restoration of working capacity—  100 per cent. approximately				• •	I	I
80	,,	,,		2	3	5
60	,,	,,	• •	4	2	6
40	,,	,,	• •		3	3
20	,,	,,	• •	2	I	3
10	,,	,,	• •			• •
	Τ	OTALS	• •	8	10	18

Gateforth.—The Medical Superintendent, Dr. H. Mainwaring Holt, writes:—

"The progress of the work done at Gateforth continues to be satisfactory.

"There can be no question as to the beneficial results of occupational therapy and in this connection it may be remarked that the more practical such occupation is, the more interesting it becomes, further more, the work must be such as is suitable to the class of patient undertaking it. At Gateforth where working-class patients only are received, there is variety of choice, gardening, poultry keeping, pig keeping, painting, joinery, blacksmith's work, polishing, boot repairing, etc., indeed we find occupations to suit all patients as far as that is possible.

"A considerable amount of time and labour has been devoted to the making and repairing of roads and footpaths. The West Drive has been repaired throughout its whole length of half a mile; a new road has been laid to the back of the Hall; pathways made in connection therewith and the old pathways in the kitchen garden have been remade.

"The Gardens.—The gardens have been improved. New plots for flowers have been laid out and a new lawn has been made on the West side of the Hall. The latter involved the leading of some 500 loads of soil in order to raise the ground to a suitable level and the lifting and replanting of a considerable number of shrubs. This lawn has improved the appearance of this part of the grounds.

"Mention may be made of the Church garden which has been set apart for flower culture. I find that the culture of flowers attracts many of the patients, some, indeed, who have left the institution have thanked me for teaching them this class of work, stating that it has mow become a hobby with them.

"Joiner Work.—We continually have recruits for joinering, and have been able to make doors, window frames, poultry shelters for our own use, besides executing a considerable amount of work in the way of repairs.

"Blacksmith Work.—We do not need much in the way of blacksmith's work, but we find it useful to be able to do such small jobs as come to hand from time to time.

"Painting Work.—We are constantly employed in this class of work, upon small jobs, such as the painting of garden seats, shelters, lockers and so on. Many patients prefer this kind of work rather than gardening and for some it is more suitable.

"Poultry Keeping.—The training of men in the keeping of poultry is very popular with the patients and every opportunity is given them to acquire a sound knowledge of the subject.

"Pig Keeping.—There is great lack of suitable buildings for the breeding and keeping of pigs. Strangely enough this lack arises from the fact that excellent farm buildings existing on the estate have been allowed to fall into such disrepair that they are unfit for accommodating domestic animals. With the expenditure of a comparatively small amount of money these buildings could be repaired and made suitable for the housing of pigs. Pig keeping could then be carried on in a more extensive and profitable scale."

Gateforth.

Pulmonary Tuberculosis for Year ended 3rd January, 1925.

Gateforth	Ma	iles.	Fem	Total.	
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 29th, 1923	• •	37	• •	12	49
Admitted	• •	125	ı	36	162
Discharged	• •	125	ı	3 <b>7</b>	<b>16</b> 3
Died	• •			• •	• •
Remaining Jan. 3rd, 1925	• •	37		II	48

Average length of stay, 120 days.

Gateforth	Mal	les.	Fem	Total.	
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Disease arrested		20	I	7	28
,, improved		80	• •	24	104
" not improved		25	• •	6	31
Totals	• •	125	I	37	163

Restora	ution of	working capacity	Males.	Females.	Total.	
14050010		working capacity				
100	per cent	. approximately	• •	20	8	28
80	,,	,,	• •	47	15	62
60	,,	"	• •	33	9	42
40	) ,,	"	• •	12	3	15
20	,,	"	• •	13	2	15
10	) ,,	"	• •	• •	I	I
		Totals	• •	125	<b>3</b> 8	163

## Non-Pulmonary Tuberculosis for Year ended 3rd January, 1925.

Gateforth	Male	es.	Fema	Total.	
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 29th, 1923	• •	I			I
Admitted	• •	3		I	4
Discharged	• •	3	• •	I	4
Died	• •	• •	• •	• •	
Remaining Jan. 3rd, 1925	• •	I	• •	• •	I

Average length of stay, 114 days.

GATEFORTH	Ma	ales.	Fen	Total.	
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Disease arrested			• •	I	I
,, improved	• •	3	• •	• •	3
,, not improved		• •	• •	• •	• •
Totals		3	• •	I	4

Restora	tion of wo	rking cana	city-		Males.	Females.	Total.
	er cent. ap	-	·			I	I
80	,,	,,	• •	• •	3		3
60	**	,,	• •			• •	
40	,,	,,		• •		• •	
20	,,	,,	• •	• •	• •	• •	
10	**	,,	• •	• •	• •	• •	• •
		Totals	• •		3	I	4

Armley House was closed on March 31st, and the patients transferred to Killingbeck.

# Armley. Pulmonary Tuberculosis for Period ended 31st March, 1924.

ARMLEY House	Mal	les.	Fem	ales.	Total.
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 29th, 1923 Admitted Discharged Died Remaining Mch. 31st 1924			8 -8 -15 I	33 22 52 3	41 30 67 4

Average length of stay, 51 days.

### ANALYSIS OF CASES DISCHARGED.

ARMLEY House	Mal	es.	Fema	ales.	Total.
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Disease arrested	• •	• •	14 I	<b>46</b> 6	60 7
Totals			15	52	67

## Non-Pulmonary Tuberculosis for Period ended 31st March, 1924.

ARMLEY House	Mal	les.	Fem	ales.	Total.
Sanatorium.	Under 15	Over 15	Under 15	Over 15	
Remaining Dec. 29th, 1923 Admitted Discharged Died Remaining Mch. 31, 1924			3	6 1 7 	9 I 10 

Average length of stay, 56 days.

ARMLEY House		Mal	les.	Fem	ales.	Total.
Sanatorium.		Under 15	Over 15	Under 15	Over 15	
Disease arrested , improved , not improved	• •	• •	••	3	3 4	6 4
Totals	• •		• •	3	7	10

Accommodation for Children.—Owing to unforseen delay it was not possible to open "The Hollies," Weetwood Lane, as a children's sanatorium until the beginning of the current year. I hope to be able to give a full account of the institution and its work in my next report.

Cases of surgical tuberculosis in children continued to be sent for treatment to institutions outside the City. During the year 26 children were treated in beds reserved for Leeds cases in the Marguerite Home, Thorparch, and 13 cases in the Lord Mayor Treloar's Hospital, Alton, Hampshire.

Central Dispensary.—Particulars of the work of the Central Dispensary are given in the table on page 110. The number who attended for treatment or examination during the year were, men 1,438, women 763, and children 568, total 2,769, and the total number of clinical examinations was 5,257.

In addition to the ordinary medical work of the Dispensary a certain number of patients attend regularly to receive treatment for surgical conditions of a minor nature, the number of such during 1924 was 255 and the total attendances 2,966. The cases treated included:—

	Tuberculin tests	• •	• •		59	in	59	cases.
	Wassermann tests		• •		47	,,	47	,,
	Aspirations of tubero	culous	abscess		224	,,	69	,,
	Galyl injections		• •		6	,,	3	,,
	Insulin injections	• •	• •		536	,,	5	,,
	Tuberlin injections	• •	• •		504	,,	94	,,
	Plaster applications	and	cellulos	e				
	splints	• •			18	,,	15	,,
	Observation	• •	• •		54	,,	13	,,
	Dressings and fomen	tation	S		1,142			
In	the laboratory the fol	llowing	g tests	were	made	:	-	
	Urines		• •		1,527			
	Blood sugar tests for	r diab	etes		15			
	Urine quantitative to	ests fo	or sugar		25			
	T.B. cultures		• •		IO			

The number of pneumo-thorax injections was 23, of which 18 took place at the Dispensary and 5 in the homes of the patients.

During 1924 X-ray examinations were made (a) of the lungs in 414 cases, 385 being adults, and 29 children, (b) of the bones and joints 18 cases, 10 adults and 8 children.

Special reports referring to tuberculous pensioners to the number of 2,336 were issued to the Ministry of Pensions.

Patients Examined at Central Tuberculosis Dispensary from December 30th, 1923, to January 3rd, 1925 PULMONARY TUBERCULOSIS.

		New patients.	nts.	Number bacteriologically positive.	Number eriologically positive.	Nur clinically but no	Number clinically positive. but not T.B.	Number found not to be tuberculous.	Number ind not to tuberculous.	Number recommended for Sanatoria.	nber nended atoria.
		M.	Į.	M.	Ţ,	M.	Ħ	M.	F.	M.	F.
Insured	•	398	205	89	36	245	144	85	25	186	130
Non-insured	•	254	318	14	18	691	244	71	56	112	134
		0	OTHER FORMS		OF TUBERCULOSIS.	ERCULO	SIS.				
P6	New patients.	Glands.	ıds.	Bone	Bones and joints.	Abdominal.	ninal.	Others and indefinite.	Others and indefinite.	Number recommended for Sanatoria.	ber nended natoria.
M.	Į.	M.	Į.	M.	Н	M.	Εij	M.	ഥ	M.	ഥ
Insured 14	8	C1	<b>C1</b>	6	0	0	Н	8	0	4	61
Non-Insured 50	35	29	81	II	9	4	8	9	3	15	OI
Total cas	Total cases:—Males Females Children	: : :	1,438 703 568	Total	attendar	attendances of all	cases:—	-Males Females	· :	15,314 13,224	

28,538

Total

2,769

Contacts.—The number of new contact cases examined during 1924 was 294 (113 adults and 181 children under 15 years of age) and the number of old contacts re-examined 164, making a total of 458. The total number of examinations of all contacts was 770. The result of the examinations of new cases was as follows:—
115 (or 39·I per cent.) were found to have definite signs of tuberculosis; 75 (or 25·5 per cent.) were suspicious; and 104 (or 35·4 per cent.) had no signs. Of the 115 definite cases, 89 (or 77·4 per cent.) were adults over 15 years of age and 26 (or 22·6 per cent.) were children under 15 years. Of the 164 old cases re-examined 49 (or 29·9 per cent.) were definitely diagnosed as having tuberculosis.

**Domiciliary Work.**—The Medical Officers made 428 visits to the patients' homes for the purpose of consultation, re-examination, special treatment or other cause. The nurses attached to the Dispensary staff made a total of 19,155 visits, of which 2,527 were to ex-service men, 1,517 for environmental reports, 13,390 re-visits to civilians, 1,238 to contacts, and 483 visits to houses where deaths had occurred.

Arrangements for the home nursing of cases have now been made with the District Nursing Association. These have been in force since the middle of the year and have resulted in much benefit to the sufferers and been greatly appreciated. The need for some such provision has long been evident but circumstances have prevented the proposals materialising earlier. Below will be found a list of cases nursed during the first half year of the working of the scheme together with the cost.

CASES VISITED BY NURSING ASSOCIATIONS.

1924.	Nursing Association.	No. of cases visited.	Cost.
Third Quarter	Leeds and District	40	£40 5 6
Fourth Quarter	1	33	£40 14 6

Care Work.—The Leeds Association for the Care of the Consumptive has continued to be responsible for this side of the work. The following is a summary of the work done by the Association during the year.

Convalescent Treatment.—This was provided for 262 cases, most of them children, through the agency of the Children's Convalescent and Summer Holiday Fund. A certain number of adults were also sent for varying periods to convalescent homes throughout the country. This is a new departure for the Committee, which in previous years restricted its efforts entirely to children, but it is an innovation which has already proved most beneficial. The total amount of money spent in providing convalescent treatment during the year was £337 16s. od.

Clothing and Bedding.—Clothing, bedding and beds have been supplied to 82 persons. Whenever a man or woman recommended for convalescent treatment or for treatment in a Sanatorium is short of the requisite clothing or other necessaries they are supplied by this Committee. The beds and bedding are, of course, given only on loan.

Money Grants.—The number of people helped financially was double that of last year. This is accounted for by the continued distress in the City owing to unemployment. When the bread winner is stricken down and has to go into a sanatorium for treatment, it is sometimes necessary to assist his wife and family in his absence, and such assistance has the double effect of preventing the health of other members of the family deteriorating for lack of food and home comforts, and at the same time easing the mind of the patient himself, who is naturally concerned about the welfare of his family.

Food.—Extra nourishment, chiefly in the shape of milk, and eggs, was provided for 351 new cases and 975 old. The grant allocated to the City by the Ministry of Health for this purpose, amounting to £978 18s. Id. was considerably overspent, so great were the demands upon it by reason of the distress prevalent through unemployment. Every attempt is made to administer the grant with discrimination so that the persons who receive help are those most in need of it. The Secretary goes into each case individually, and reports to a Special Committee, which in turn decides whether the case is deserving and what contribution, if any, is to be made by the family towards the cost. The total amount spent on this item during the year was £1,021 os. Id. The number of milk coupons issued during the year was 1,326, and the amount of dried milk distributed was 1,960 lbs.

Appliances and Sick-room Accessories.—Medical and surgical appliances, such as splints, spinal jackets, surgical boots, crutches, etc., were supplied on the recommendation of the Health Committee to 19 people.

Assisted in other ways.—Eighteen other persons were assisted in one way or another.

Total services rendered.—The total persons assisted were 800 (exclusive of 975 repeats), and the expenditure was £425 IIs. 10d., exclusive of the special grant for extra nourishment from the Health Committee, and the income £377 os. 2d., leaving a debit balance at the end of the year of £48 IIs. 8d.

Visits and interviews.—The Secretary's visits and interviews numbered 2,479.

Meeting of Committee.—The Special Care Committee has met 40 times during the year and dealt with 1,600 applications.

Dealing with the work of the year, Dr. Z. P. Fernandez, the Acting Chief Clinical Tuberculosis Officer, writes:—

"Dispensary Clinics.—During the latter end of the year the work of the Tuberculosis Dispensary was re-arranged, after a report on the re-organisation of the Dispensary submitted by the Acting Clinical Tuberculosis Officer to the Tuberculosis Sub-Committee, following his appointment in October last.

"The number of clinic sessions has been increased to facilitate primary examinations and to expedite re-examinations and the examination of contacts. Two doctors are now available for routine work. For each session a convenient number of patients attend for examination, avoiding thereby undue waiting and overcrowding. These sessions are arranged in groups according to the wards of the City from which they come, so that the nurse-visitors of the respective wards are able to be present to follow up their cases. Insured cases are examined at three-monthly periods and referred for routine treatment to their panel doctors. The doctors are requested to send regularly G.P. 36 forms, and their recommendations for institutional or dispensary treatment receive due consideration.

"Sessions are arranged for special treatment like artificial pneumothorax, aspiration, splinting (plaster and cellulose) and treatment of bone and joint cases, also for carrying out diagnostic tests. Workers attend on two evenings per week. Clinics for children and contacts have also been increased.

"Certain non-insured patients receive routine treatment at the dispensary, but, on the whole, medicinal treatment is discouraged. By individual and collective talks patients are educated in the hygienic and dietetic measures necessary to increase their resistance against the disease.

"Cases recommended for nourishment grants by doctors or nurse "visitors are examined, or visited before being referred to the Care "Committee.

"Notifications.—In Leeds the majority of cases are referred by the local doctors for a confirmatory diagnosis by the Tuberculosis Officer, either at the Dispensary, or if bed-fast, in their own homes. Every case in which the diagnosis is definite is immediately reported to the doctor concerned with a request that he should notify the Medical Officer of Health forthwith.

"A list of these cases is sent regularly from the dispensary to the Medical Officer of Health for subsequent B. form visits to be undertaken by the tuberculosis nurse visitor. By this method, not only are errors in diagnosis checked, but uniformity of classification is ensured.

"A few doctors make use of the insurance form G.P. 35 in suspected cases and the revised form G.P. 17 for definite cases. Similar forms are sent from the dispensary to the panel doctor in cases where tuber-culosis is suspected by the nurse visitor. In this way contact with the doctor is established and co-operation encouraged.

"The number of deaths reported simultaneously with, or subsequent to, notification was still large. The fault, in the majority of these cases, lay with the patients themselves, who delayed seeking medical advice till the last moment. The lack of knowledge of existing facilities for dispensary treatment also explains the delay in a certain number. By educating the public in the advantage of seeking medical advice early and by the systematic examination of contacts a reduction of the number of un-notified cases may confidently be expected. The number of cases with early disease seeking advice at the dispensary is steadily increasing, which may to some extent explain the increase in the number of cases notified during the year.

"Domiciliary Work.—During the past year an attempt was made to anticipate the Ministry of Health's circular No. 549 to trace all notified cases from 1912 onwards through the nurse visitors. This work is still in progress, and it is gratifying to report that over 40 per cent. of the cases traced monthly are found to be alive. Owing to marriage, change of address, untraced deaths, etc., a number of the earlier notifications cannot be traced. Cases previously notified and not considered definitely tuberculous at the time of the first examination were re-examined during the year for the purpose of ascertaining whether there had been any change in the interval.

"Every week the Tuberculosis Officer meets the nurses to discuss matters of importance and examine their reports. During the year there were nine nurses in continuous service.

"The increasing number of visits paid by the medical officers for purpose of diagnosis or treatment indicates that the public and local doctors appreciate the facilities offered at the Dispensary.

"Co-operation with other Organisations.—From the report of the Association for the Care of Consumptives it is evident that there is a "close link with that organisation.

"Ex-Service Men's Association.—Suitable cases are referred to the "Secretary of that Association at the 'Factory-in-the-Field' for part "time and graded employment. Men who have had tuberculosis for over five years may be said to be suffering, not so much from disease, as from disability occurring from disease. Part-time employment, under medical supervision, is of great benefit to such.

"Ministry of Pensions.—A large number of ex-service men are examined periodically for the Ministry of Pensions, either for fresh claims or the renewal of pension.

"Voluntary Hospitals.—Due consideration is given to recommendations of the medical staffs of the Leeds General Infirmary, Public
Dispensary, Women and Children's Hospital, and other Institutions,
for treatment, convalescence, and nourishment grants for patients
referred to the Dispensary.

"School Department.—There is close co-operation with the school medical officers in matters concerning the treatment of tuberculous children of school age, their fitness for attendance at school, convalescence, institutional treatment, etc.

"General.—In conclusion, with the completion of the structural alterations at present in progress, the staff and patients will be accommodated under more congenial conditions than are available at present. The inauguration of X-ray, artificial sunlight and dental departments will make the institution a more efficient unit. It is also expected there will be closer co-operation between the Dispensary and the Sanatoria by the interchange of officers.

"In reviewing the work of the year one notes that the death-rate "from gland, and bone and joint tuberculosis has considerably decreased "in comparison with past years. Tuberculosis meningitis and abdominal "tuberculosis being classified under non-pulmonary tuberculosis gives "the impression that deaths from non-pulmonary tuberculosis are not "decreasing. Tuberculous meningitis in children under five years of age "is generally a fatal disease, and accounts for over 35.5 per cent. of the "deaths of the non-pulmonary group. The outlook of children of school "age (5-15) with pulmonary root gland tuberculosis is hopeful, and "they improve remarkably in open-air schools. From the reports of "the Medical Officer of Health for the five years 1919-1923 it will be "seen that of the 2,661 deaths from pulmonary tuberculosis 62.9 per "cent. occur between the age period 15-45, 3.2 per cent. under 5; 5.3 "per cent. 5-15; and 28.6 per cent. over 45. It is evident, therefore, "that the adult type of the disease (age group 15-45), which accounts "for the greatest mortality, demands the most attention. Of the 687 "non-pulmonary deaths during the five years above mentioned, 41.3 " per cent. were under 5 years of age, 21.7 per cent. 5-15; 26.2 per cent. "15-45; and 10.8 per cent. over 45.

"The fact that 40 per cent. of old notified cases are found to be alive after a period of 10 years proves that a considerable amount of good is being done and that the tuberculosis scheme is bearing fruit. There seems no doubt but that in recent years the expectation of life of the consumptive has been increased.

### MATERNITY AND CHILD WELFARE.

Statistics.—Unlike the preceding year, 1924 was most unfavourable to infant life. Of the 8,558 babies born no fewer than 921 (or 10.8 per cent.) of the total died before they attained the age of one year. At the same time, as stated in a previous section of this report, the birth-rate declined from 18.5 to 18.1, so that there was a total nett loss to the population as compared with 1923 of 274 lives. The infantile mortality rate for the year was 108, or 19 more than the figure for the previous year (89) and exceeded the average of the previous five years by 5. As compared with the ten other large towns in England and Wales the Leeds rate was highest, exceeding Liverpool, which is next on the list by 5 and Bristol which had the lowest rate by 39. This is a disappointing record, and, were there not extenuating circumstances to explain the high figure, one might feel discouraged. I have already referred to the prevalence of influenza of a more than ordinarily severe type in the first quarter of the year which carried off a large number of infants and young children and raised the infantile mortality rate for the period to a point which, with the exception of 1918-19, the year of the great pandemic, had not been reached for the last twenty-four years.

Influenza is undoubtedly one of the most important of the killing diseases of infancy. In this respect it equals, if it does not surpass, whooping cough and measles. It is nearly always accompanied by pneumonia, and taken with the pneumonia figure the deaths of children under one year from these two diseases alone amounted to no fewer than 214. What I have said about pneumonia with regard to adults applies even with greater force to the young child. It cannot be doubted that a good deal of blame for this very high incidence of pneumonia rests with the dirty state of the atmosphere together with the bad housing conditions which exist in some parts of the City. Not only are the houses themselves bad but the accompanying overcrowding greatly reduces a baby's chance of surviving attack by such a virulent disease as pneumonia.

A glance at the table on page 119 will indicate the wards of the City where the highest death-rates of infants have occurred. are all wards which are more or less congested, and some of them actually possess insanitary areas, in addition to which most of them are drenched with smoke, which is, as has often been stated, an important exciting factor in the incidence of respiratory diseases. The question might be asked could not some of these children have been saved in spite of their surroundings? Undoubtedly the majority of the deaths were from preventable causes and might have been prevented had the home circumstances been more favourable and the infection less acute. Unfortunately some of the cases were not seen by a doctor until it was too late whilst others by reason of the severity of the attack were doomed from the first. Parents are too much inclined to think lightly of a feverish cold in a child, and fail to appreciate the gravity of the attack until the disease has advanced too far. However, as the public become more enlightened in matters relating to the causation of disease generally, one may anticipate a greater reduction in the casualty list from these respiratory infections. The younger the child the greater care should be exercised to protect it from infection.

Probably the set back of 1924 is only temporary, and with more favourable climatic conditions during the current year we may confidently look for a restoration of the infant death-rate to that of 1923.

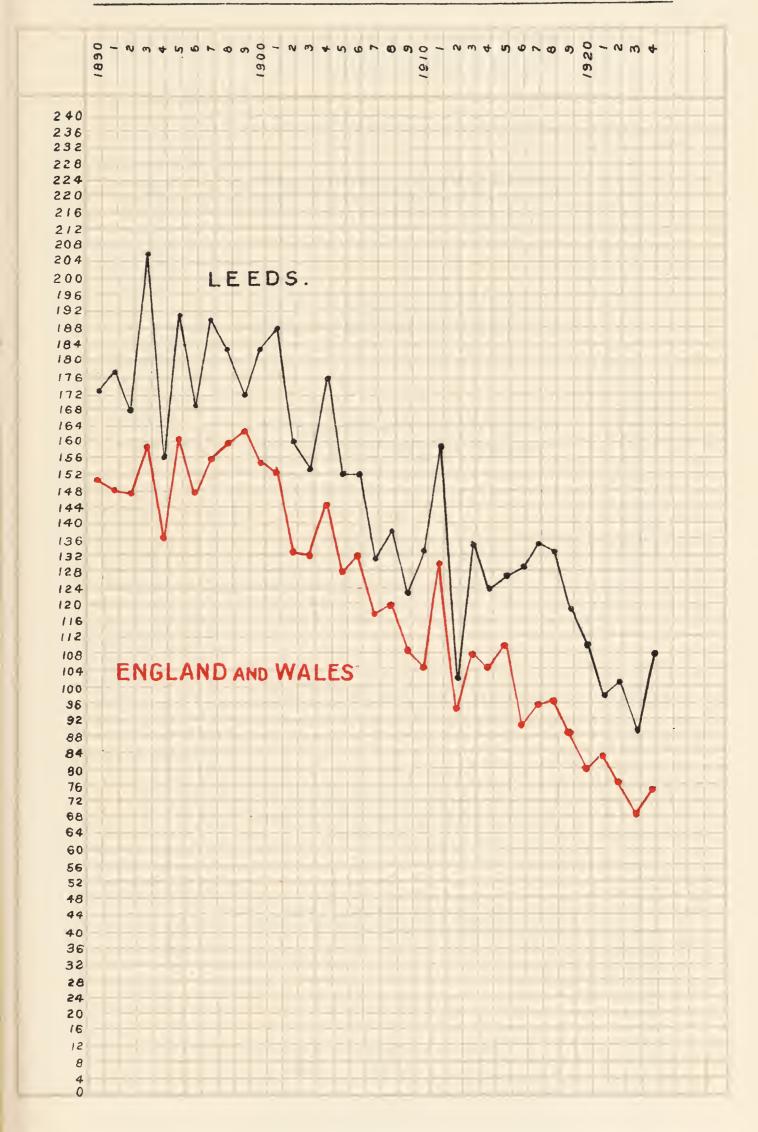
Death-rate in quarters.—The infant mortality rate for the four quarters of the year is given in the accompanying table.

	-			0		1 ) (	
			I.	II.	III.	IV.	Year.
1917	7	• •	121	122	152	151	135
1918	• •	• •	162	101	114	155	133
1919	• •	• •	173	102	123	96	119
1920	• •	• •	139	95	88	I12	110
1921	• •	• •	108	78	101	108	98
1922	• •	• •	119	106	77	101	101
1923	• •		114	74	86	82	89
1924	• •	•••	171	83	68	109	108

INFANTILE MORTALITY DURING THE ELEVEN YEARS 1914-1924 AT DIFFERENT PERIODS OF THE FIRST YEAR OF LIFE.

1			1												
Rir	Births	Under or	Under one weck.	Under one month.	e month.	One and under three months.	nd under months.	Three and under six months.	d under	Six and nine m	Six and under nine months.	Nine and under twelve months.	d under months.	Under one year.	ne year.
3 2	in year.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
	10,652	277	26.0	455	42.7	236	22.2	252	23.7	201	18.9	180	16.9	1,324	124
	9,877	258	26.1	413	41.8	194	19.6	242	24.5	205	8.02	661	20.1	1,253	127
	9,432	247	26.2	437	46.3	220	23.3	234	24.8	156	16.5	691	17.9	1,216	129
	7,566	62 I	23.6	318	42.0	185	24.4	213	28 · 1	159	21.0	148	19.5	1,023	135
	7,392	189	25.6	316	42.7	154	8.02	661	26.9	175	23.7	140	18.9	984	133
	7,564	230	30.4	373	49.3	147	19.4	156	20.6	125	16.5	98	13.0	899	119
	11,229	304	27.1	520	46.3	260	23.2	161	17.0	146	13.0	115	10.2	1,232	110
	10,144	249	24.5	419	41.3	184	18.1	180	17.7	911	11.4	86	1.6	266	86
	9,253	206	22.2	401	43.3	159	17.2	125	13.5	127	13.7	123	13.3	935	101
	8,684	204	23.5	363	41.8	OII	12.7	125	14.4	92	10.6	83	9.6	773	88
	8,558	185	21.6	331	38.7	156	18.2	155	18.1	150	17.5	129	15.1	126	108

### INFANT MORTALITY PER 1000 BIRTHS, 1890 - 1924.





INFANTILE MORTALITY IN WARDS AT DIFFERENT PERIODS OF THE FIRST YEAR OF LIFE, CALENDAR YEAR, 1924.

WARD.	Births	Undero	Under one week.	Under one month.	e month.	One and under three months.	and under e months.	Three ar	Three and under six months.	Six and under nine months.	l under onths.	Nine and under twelve months.	d under months.	Under o	Under one year.
	year.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.	Deaths.	Rate.
Central	1			7		9				9	•	8	8.6	26	112
North	919	0	14.6	21	34.1	6	14.6	12	19.5	17	27.6	15	24.4	74	120
North-East	736	II	•	24		12	•	7		15	20.4	15	20.4	73	66
*New Ward	176	7	•	∞		I	•	Ι		:	•	:	•	10	22
East	830	20	•	31		20	•	18		61	22.9	21	25.3		131
South	321	OI	•	12	•	6	•	91		∞	4	3	მ	48	150
†East Hunslet	864	22	•	42		18	•	II	•	14	9	OI	$\dot{\pm}$		110
West Hunslet	530	7	•	14		6	17.0	14		7	භ	6	•	53	100
Holbeck	585	10	•	23		6	15.4	II		7	Ċ	15	ro ·		111
Mill Hill	85	4		5		:	•	2		3	Ď.	Η	$\dot{\pm}$		129
West	455	13	•	20		OI	<b>i</b>	12		6	19.8	9	13.2	57	125
North-West	505	II	•	61		OI	19.8	4		7	ന	3	v.		85
Brunswick	398	61	•	24		9	ů.	∞		5	Ġ	5	ġ		121
New Wortley	375	$\infty$	•	13		2	ന	5	თ	9	9	9	•		93
Armley & Wortley	581	9	•	15		13	Ġ	II	· •	2	•	6	v.		91
Bramley	383	9		91		9	Ö.	9	•	II	28.7	23	•		107
Headingley	885	61		37		13	4	12	က	II	73	7	•		06
CITY	8,558	185	21.6	331	38.7	156	18.2	155	18.1	150	17.5	129	15.1	921	108
					_										

\* Roundhay, Seacroft, Shadwell and Crossgates.

†Including Middleton.

Deaths in Age Groups.—Of the total (921) infant deaths 185 (or 20·1 per cent.) took place in the first week of life, 331 (or 35·9 per cent.) in the first month, 156 (or 16·9 per cent.) between one and three months, 155 (or 16·8 per cent.) between three and six months, 150 (or 16·3 per cent.) between six and nine months, and 129 (or 14·0 per cent.) between nine and twelve months.

The increases over the figures for 1923 were in children between one and three months, three and six months, six and nine months, and nine and twelve months. The figures for the earlier age period, namely, the first week and the first month, actually show a decrease, thus proving that the conditions responsible for causing death were not congenital in origin but belonged to the post-natal period. Even so, as will be observed from the table below, the figures, bad as they were, compare favourably with the averages of the last ten years.

The percentage changes in the infant death-rate per 1,000 births in 1924 as compared with the average of the previous ten years are as follows:—

```
Under I week, decrease 15 \cdot 3\% | 3-6 months, decrease .. 14 \cdot 2\% Under I month ,, 11 \cdot 6\% | 6-9 ,, increase .. 5 \cdot 4\% I-3 months ,, 9 \cdot 5\% | 9-12 ,, ,, .. I \cdot 3\% Whole year decrease, 7 \cdot 7\%
```

It is interesting to note the changes which have taken place at the various age periods of infancy since the quinquennium 1905-1909. The quinquennium average has been taken in order to emphasize the increase or decrease. These are set out in a special table which appears on page 122.

DEATHS FROM STATED CAUSES UNDER ONE YEAR OF AGE.

	1		1	
Causes of death.	Year 1923.	Year 1924.	Increase or decrease.	Percentage of total deaths under one.
Smallnov				
Smallpox	• •	• •		• •
Chickenpox	I	8	- I	
Measles			- I	0.9
Scarlet Fever		• •	- 2	
Whooping Cough	13	35	+22	3.8
Diphtheria	2	2		0.2
Influenza	7	3 <u>I</u>	+24	3.4
Erysipelas	I	I		0.1
Tuberculous Diseases	23	22	- I	2.4
Meningitis		II	- 3	I *2
Convulsions		55	- 4	6.0
Bronchitis		82	+41	8.9
Pneumonia (all forms)		183	+85	19.9
Other diseases of Respira-				
tory Organs		7	+ 3	0.8
Diarrhœa and Enteritis		89	- 19	9.7
Gastritis	9	3	- 6	0.3
Syphilis		27	+ 3	2.9
Rickets		2	+ I	0.2
Suffocation, including				
overlying	I	14	+13	1.5
Injury at birth		25	+ 3	2.7
Atelectasis		19	- 6	$2 \cdot I$
Congenital Malformations		38	+ 4	4·I
Premature birth		144	- 15	15.6
Atrophy, Debility, and				
Marasmus	84	84	-+	9.1
Other Causes	32	39	+ 7	4.2
Totals	773	921	+148	100

PERCENTAGE CHANGES (5 YEAR PERIODS) IN THE INFANT DEATH-RATE PER 1,000 BIRTHS AS COMPARED WITH THE AVERAGE OF THE FIVE YEARS 1905-1909.

1	. ψ •				
Under one year.	Percentage increase or decrease over 5 years period 1905-1909.		-5.8%	-7.2%	-27.3%
Un	Rate.	139	131	129	101
Nine and under 12 months.	Percentage increase or decrease over 5 years period 1905-1909.		-3.2%	-3.8%	-37.6%
Nine a	Rate.	9.81	18.0	6.71	9.11
Six and under nine months.	Percentage increase or decrease over 5 years period 1905-1909.		-12.6%	-14.3%	-42.6%
Six ar	Rate.	23.0	20·I	2.61	13.2
Three and under six months.	Percentage increase or decrease over 5 years period 1905-1909.		-14.6%	%2.01-	-42.5%
Three six n	Rate.	28.0	23.9	25.0	1.91
One and under three months.	Percentage increase or decrease over 5 years period 1905-1909.		-3.1%	-15.7%	%8.62-
One ar	Rate.	25.5	24.7	21.5	6.21
Under one month.	Percentage increase or decrease over 5 years period 1905-1909.		-0.5%	+0.2%	-4.5%
Und	Rate.	44.3	44 · I	4 . 4	42.3
Under one week.	Percentage increase or decrease over 5 vears period 1905-1909.		+1.5%	+0.8%	-9.5%
Und	Rate.	26.2	26.6	26.4	23.8
	Five year period,	1905 to 1909	1910 to 1914	1915 to 1919	1920 to 1924

BIRTHS AND DEATHS UNDER ONE YEAR WITH RATES.—CALENDAR YEAR 1924.

Illegitimate death rate per 1,000 illegitimate births.	154 324 189 189 212 222 143 190 242 286 229 240 185 115 231
No. of illegitimate deaths under one year.	2 H 7 : 7 7 5 4 8 2 8 9 7 8 8 8 8 9 8 8 9 9 8 8 9 9 8 8 9 9 9 9
Legitimate death rate per 1,000 legitimate births.	109 108 94 58 128 143 109 96 103 1115 116 90 90 103 87
No. of legitimate deaths under one year.	24 63 66 102 102 42 90 49 47 43 32 50 38 74
Death rate per r,ooo births.	112 120 99 57 131 150 110 111 129 125 85 121 93 91 107
Total deaths under one year (nett).	26 74 73 109 109 48 95 53 65 11 57 48 80 80
No. of illegitimate births.	13 13 13 13 13 14 15 16 17 18 18 18 18 18 18 18 18 18 18
No. of legitimate births.	220 582 699 172 797 294 829 509 552 420 480 371 357 555 370 850 850
Birthrate per 1,000 population.	18.34 14.28 19.98 19.12 23.04 24.65 22.93 14.55 19.60 16.03 20.50 15.84 16.49 20.71 15.43 16.75
Total Births (nett).	233 616 736 176 830 321 864 535 535 535 535 535 535 535 535 535 53
WARD.	Central North North-East North-East South East South Feast Hunslet West Hunslet Mill Hill West North-West Brunswick North-West Sew Wortley Armley & Wortley Bramley Armley & Wortley Armley & Wortley Crry

\*Roundhay, Seacroft, Shadwell and Crossgates. †Including Middleton.

Neo-natal Death-rate.—The number of deaths of infants occurring in the first month of life was 331 or 32 less than for the year 1923 and the corresponding rate was 38.7 as against 41.8.

Causes of Infant Death.—The main causes contributing to the infantile death-rate were pneumonia (183), premature birth (144), diarrhoea and enteritis (89), atrophy, debility and marasmus (84), Grouped according to the system affected, that bronchitis (82). relating to the respiratory organs including influenza is far and away the highest, accounting for not less than 32.9 per cent. of the total. The group next in importance is that which includes premature birth, congenital malformations, atrophy, debility and marasmus, all conditions of unknown origin which refer more to the pre-natal than to the ante-natal period. Taken together these two groups account for almost 62 per cent. of the total infant deaths. conditions which comprise the congenital groups are difficult to control because they are mostly ante-natal in origin. The respiratory group, however, is composed of diseases which are mainly preventable as I have already stated in a previous paragraph. The whole object of ante-natal work is to reduce the death-rate from congenital causes, and, though up to the present the results of our efforts in that direction have not been so successful as had been anticipated, nevertheless progress has been made and every year sees a greater saving of life in the first month which is the time when most of these congenital causes reach a fatal termination.

Illegitimate Death-rate.—Of the 423 illegitimate births 86 (or 20·3 per cent.) died before reaching the age of one year which is equal to an infantile death-rate of 203. This is an increase of 34 per thousand as compared with the rate for 1923 which was 169.

#### SUPERVISION OF MIDWIVES.

Number of Midwives.—The number of midwives on the register at December 31st, 1923, was 89. Thirty new names were added during the year, 21 names were removed, leaving a total on the register at December 31st, 1924, of 98. Of the total, 37 were attached to institutions. The actual number who took cases during the year was 88, of whom 73 (or 83 per cent.) were trained and 15 (or 17 per cent.) untrained. The number of births attended by midwives was 4,059 (or 45.8 per cent.) of the total births registered.

The following table gives an analysis of the cases attended by midwives:—

	Trained.		Untrained.			
	73 midwives es attended per midwife	3,222	Total cases attended 83 Average per midwife 56 cases.			
No. of Cases			Cases.	Practising on their own account.		
Over 300		I	Over	300		
,, 200	I		,,,	200		
,, 150		I	, ,	150		
,, 100	7	2	,,	100	3	
,, 75	3	3	,,	75	2	
,, 50	I	*******	,,	50	3	
,, 25	7	3	21	25	I	
,, IO	7	5	,,	10	3	
5	7	5	7.7.7	5	2 ·	
Under 5	II	9	Under	5	I	

Fifteen trained midwives (8 attached to institutions) and three not trained, took no cases during the year.

Inspection of Midwives.—The inspection of midwives' bags, books and appliances was carried out regularly during the year, the total number of such inspections made being 168. In addition to these inspections, the inspector of midwives paid 158 visits. Midwives were interviewed on 46 occasions in connection with breaches of the rules of the Central Midwives Board and other minor misdemeanours.

Fifteen complaints against midwives were investigated and arising out of these investigations the midwives concerned appeared before the Medical Officer of Health or his Assistant for reprimand or censure. Two cases of serious breaches of the rules were reported to the Maternity and Child Welfare Committee which after taking all the circumstances into consideration decided that they would be met sufficiently by the Medical Officer of Health interviewing the women concerned and warning them to be more careful in the future.

There were 34 enquiries into maternal deaths, 12 visits to nursing homes for the purpose of inspection and 57 visits to maternity nurses and handywomen for the purpose of instruction or limitation of practice.

Advising Medical Help.—Notifications of having advised medical assistance were received in 1,037 cases which may be classified as follows:—

Illness during pregnancy, or abortion			 30
Malpresentation			 50
Delayed or obstructed labour		• •	 179
Ruptured perineum			 167
Retained membrane or placenta	• •	w. • •	 42
Hæmorrhage			 44
Convulsions, eclampsia			 3
Puerperal rise of temperature			 46
Illness of mother during puerperium			 64
Illness of child			 152
Infants—discharging eyes			 74
Artificial feeding			 27
Death of infant under ten days			 32
Stillbirths			 106
Suspected infectious disease			 16
Maternal deaths			 5

Midwives' Emergencies.—During the year 243 claims were made by medical practitioners in the City for attendance on emergencies of labour under Section 14 of the Midwives Act, 1918. Of these 19 were paid direct by the parent whilst the remainder, 224, were settled by the Local Authority at a total cost of £180 15s. 5d.

Puerperal Fever Cases.—Cases of puerperal fever and high temperature were investigated and where the case was infectious disinfection of the midwife's person, clothing and maternity bag was carried out under the personal supervision of the chief woman inspector. The total number of visits paid for this purpose was 68 and the total number of midwives disinfected 32. In addition 23 visits were paid in connection with infection other than puerperal fever. The number of cases of puerperal infection reterred to the district nurses for treatment were 17. The object of this provision is to free the midwife from her obligation to continue her attendance on the case till the expiry of a period of 10 days after the birth of the child.

Handywomen.—In addition to visits paid to midwives II visits were paid to handywomen and I2 handywomen were disinfected.

I should like to sound a note of warning which I hope will reach the ears of certain women in this City who are acting illegally as midwives, some of them under the pretence of being covered by a doctor and others entirely on their own account. Should these irregular practices continue steps will be taken to bring the offenders to judgment and it is unnecessary to remind medical practitioners that in allowing these women to use their names they are exposing themselves to risks which might entail serious consequences.

Still-births.—The number of still-births do not vary to any extent from year to year. For the last decade since 1915 they have remained at or about 4 per cent. of the total births. The number notified during 1924 was 348 (or 4·1 per cent.) of the total births notified, which is a decrease of 31 on the figure for last year which was 379 (or 4.4 per cent.).

The following table shows the comparison between live-births and still-births for the last eleven years:-

	BIRTHS N	OTIFIED (LIVE	E AND STILL).	
Year.	Live births notified.	Still-births notified.	Total births notified live and still.	Percentag still-birt total bir
1014	0.738	105	0.843	1.1

Year.	Live births notified.	Still-births notified.	Total births notified live and still.	Percentage of still-births to total births.
1914	9,738	105	9,843	I · I
1915	8,153	350	8,503	4.1
1916	7,836	394	8,230	4.8
1917	7,017	328	7,345	4.2
1918	6,892	287	7,179	4.0
1919	7,684	340	8,024	4.2
1920	10,749	461	11,210	4°I
1921	9,462	466	9,928	4.7
1922	8,658	418	9,076	4.6
1923	8,264	379	8,643	4 · 4
1924	8,105	348	8,453	4.1

Notification of Births Act came into force 1st January, 1914.

Of the 348 still-births notified, 106 (or 30.5 per cent.) were by midwives, and the remainder, 242 (or 69.5 per cent.) by medical practitioners, or institutions.

Ante-Natal Work.—The total number of expectant mothers attending the 14 ante-natal centres during the year was 1,276. Of these, 993 were new and attended for the first time. The total attendances at all the centres including Meanwood, Harehills and Cross Gates was 6,443, an increase of 425 compared with 6,018 for 1923.

It is gratifying to note that there has been some little improvement in the attendances at the ante-natal clinics during the year, but the number is still far from satisfactory. The solution of the problem of maternal mortality which is causing so much anxiety in medical circles at the present time lies undoubtedly to a large extent in the proper treatment of the mother during pregnancy. If every expectant mother could be kept under skilled observation for the whole of the pre-natal period there can be no doubt that the number of childbed fatalities would be greatly reduced, as also would the number of babies dying before birth and in the first month of life. But it is hard to impress the importance of ante-natal care on the mother herself; she is reluctant to think that anything can possibly go wrong and believes often in the face of unmistakable danger signals that all is well. It is only by educating the young girl, in the years before she enters the marriage state, in the principles of mothercraft and the hygiene of pregnancy that she will be able to understand and take advantage of the facilities provided for securing the health of herself and her baby. Lessons in mothercraft are now being given to the older girls in our elementary schools, not as part of the curriculum, but as an extra subject. The extension of this practice on the lines laid down in the memorandum recently issued by the Board of Education is strongly to be recommended. Meanwhile both doctors and midwives should make a practice of insisting that every woman who engages them for her confinement should present herself for examination at regular intervals during pregnancy and right up to the onset of labour. It may take up a little of the time of the doctor or midwife, but it is time well spent, because it will make the conduct of the labour so much easier and so much safer.

Particulars of the work of the ante-natal clinics are set out in the following table:—

EXPECTANT MOTHERS ON REGISTER.

Welcome.		No. on register at beginning of year.	Registered during year.	Live Full Term.	Births.  Premature.	On register end of year,	Total attendance of expectant mothers.
Ellerby West Street Burmantofts Hunslet University Woodhouse Holbeck Armley Chapeltown St. Nicholas Bramley New Wortley Middleton		26 23 24 22 18 20 47 22 26 19 11	107 85 71 84 66 78 140 81 70 68 42 53 23	85 67 54 81 51 65 100 71 55 56 36 44	4 3 1 2 2 1 2 2	32 25 33 23 15 23 39 25 22 23 9 21 6	729 360 689 514 450 337 527 708 353 331 610 655 107
West Hunslet Totals		283	993	788	18	316	6,434

Of the 1,276 mothers on the register 16 miscarried and 37 had still births.

In addition to the above 9 expectant mothers attended at Centres where no ante-natal clinic is held, namely:—Meanwood 7, Harehills and Crossgates one each, making a total of 6,443 attendances.

Natal Work.—Of the total births registered in the City 1,818 (or 20.5 per cent.) took place in institutions or nursing homes as compared with 1,769 (or 19.7 per cent.) in 1923.

The tendency for women to be confined away from home is still on the increase. The reason for this is two-fold, first, the lack of accommodation in the home, and secondly, the difficulty of obtaining sufficient domestic help. The latter has undeniably added to the difficulty of conducting a confinement in a private dwelling, and there seems little doubt but that the future will see a much greater proportion of births taking place in institutions. The special provision made for maternity cases by the Corporation in the three Poor Law Union Infirmaries, Leeds, Hunslet and Bramley, has been fairly well taken advantage of. The scheme came into actual operation on April 1st, and, as was to be expected, it took a little time before the prejudices against anything which

savours of the Poor Law was dispelled, but, as soon as it came to be realized that the accommodation provided was as good as any available in an ordinary hospital, the number taking advantage of the facilities increased rapidly, especially so at Bramley. The number of cases admitted up to December 31st, in the three Infirmaries was as follows:—Leeds 7, Hunslet 5, and Bramley 18. In the Corporation beds at the Maternity Hospital 349 cases were treated.

The provision of a special ambulance for the removal of maternity cases to the various lying-in institutions in the City has been a great boon to many mothers. It has been well taken advantage of and has undoubtedly been the means, if not of actually saving life, of reducing the suffering inseparable from childbirth, especially in abnormal or difficult cases. A total of 144 cases were removed in the ambulance during the year (7 months).

An analysis of the births registered as occurring in the various lying-in institutions in the City is given in the following table:—

Institution.	No. of births.	Percentage of total registered.
Leeds Maternity Hospital St. Faith's Home Leeds Township Infirmary Holbeck Township Infirmary Bramley Township Infirmary Hospital, H.M. Prison Hope Hospital Leeds General Infirmary Women and Children's Hospital. City Hospital, Seacroft Private Nursing Homes  Total	77 93 6 20 	15.92 0.87 1.05 0.07 0.23  0.14 0.06 0.06  2.13

Illegitimate Births in Institutions.—Of the 1,818 births which took place in institutions 348 (or 19·1 per cent.) were illegitimate. This is an increase of 8 on the figure for last year, though the percentage remains practically the same.

Maternal Mortality.—I have already had occasion in another part of this report to make reference to the continued high rate of maternal death which is causing a good deal of uneasiness throughout the Country. In Leeds the rate is not so high as some other areas, but nevertheless, one has to admit that it is higher than it ought to be. In a period of ten years (1914-1923) the total wastage of mother life amounted to 399, or an average of 40 per year, and a death-rate of 4·27 per thousand births. Last year the number was 33, which is equal to a rate of 3·86. Of the number 7 (or 21·9 per cent.) were in the practices of midwives, 19 (or 59·4 per cent.) in the practices of doctors, and 6 (or 18·7 per cent.) in institutions.

The causes are to a very large extent obscure, but sepsis or child-bed fever, as it is commonly known, plays a very important part. Now child-bed fever is a preventable condition in the majority of instances, and it is a grave reflection on the midwifery service that there should still be so many cases. To attempt to fix the blame for this state of affairs is an unprofitable proceeding and The fact remains that puerperal sepsis is still leads nowhere. far too common, and the continued prevalence of the disease indicates carelessness or ignorance on the part of the person in attendance at the time of birth or after the birth has actually taken place. I cannot help feeling that much of the trouble is due to meddlesome midwifery, and both the doctor and midwife ought to appreciate that the less they interfere with a lying-in woman the better. I have already referred to the need for antenatal supervision, for I am convinced that it is only by proper treatment and care during the ante-natal period that abnormality of mother or baby can be detected and rectified.

As regards puerperal sepsis I have already referred to the extended facilities provided by the Corporation for the treatment of the disease. See page 67.

The following table gives particulars of the maternal deathrate in Leeds for the last 13 years (since 1911):—

MATERNAL MORTALITY.

-								
	Year.		No. of	Death-rate per 1,000 births from				
			deaths.	Sepsis.	Other causes.	Total childbirth.		
					*			
	1911		42	1.21	2.46	3.97		
	1912		41	1.15	2.78	3.93		
	1913	• •	61	2.74	3.02	5.76		
	1914		62	3.16	2.61	5.77		
	1915		41	1.62	2.23	4.15		
	1916		39	1 • 48	2.65	4.13		
	1917		22	1.06	1 · 85	2.91		
	1918		21	0.95	1 · 89	2 · 84		
	1919		36	1.72	3.04	4.76		
	1920		58	3.03	2.14	5.17		
	1921	• •	38	1.28	2.46	3.74		
	1922		33	1 · 84	1.73	3.57		
1	1923		49	2.07	3 · 57	5.64		

From Registrar-General's Annual Reports.

Post-natal Work.—The number of births notified during the year (exclusive of still-births) was 8,105 (or 91.5 per cent.) of the total births registered.

Home Visiting.—First visits were paid by the health visitors to 9,020 infants. The number of re-visits was 42,045 which together with first visits makes a total of 51,065 visits for the year.

The staff of health visitors was increased during the year by two, which brings the total up to 21. Even this number falls short of that required to maintain an adequate supervision over all children under five years. The ideal to be aimed at is that each child born should receive three visits in the first year of life, two in the second and one every succeeding year up to five years. Only in this way can errors in feeding and management of the young child be detected and rectified in addition to which by frequent visits absenteeism from the Infant Welfare Centres can be reduced.

A complete summary of the work of the health visiting staff is appended:—

		VISITS.
Notified births including revisits	• •	51,065
Still-births including revisits	• •	1,035
Ophthalmia neonatorum	• •	211
Measles	• •	12,694
Whooping cough		3,490
Pneumonia	<b>3</b> 6	2,850
Medical aid claims		249
Other cases		4,613
Expectant mothers	• ••	594
Ill children notified from the Le	eeds	
General Infirmary and Pu	blic	
Dispensary	•-•	2,753

Infant Welfare Centres.—The number of Infant Welfare Centres in the City was increased during the year by four, bringing the total up to eighteen. The districts served by the new centres are West Hunslet, Burley, Harehills and Crossgates. All of these, with the exception of the last-mentioned, have a population of over 20,000. with approximately 400 births in each. Prior to the opening of the new centres mothers residing in these districts had to take their babies to the nearest centre, which in some cases was over two miles distant. Thus West Hunslet babies attended the Holbeck centre, Burley the West Street centre, and Harehills the Burmantofts centre, whilst such babies as did attend a centre, from Crossgates, either went to the York Road centre, or to one held in the neighbouring village of Halton, which is outside the City boundary. Already these centres have found favour in the eyes of the people living in the districts where they are situated and are well attended, though at the present time they only have one, or at the most two sessions a week.

Attendances made at Infant Welfare Centres during Year 1924.

	Cons	sultations meetings.	and	Morning treatment.				
Welcome.	Mothers.	Babies under 1 year.	Babies 1—5 years.	Mothers.	Babies under 1 year.	Babies 1—5 years.	Callers.	
Ellerby	3,695	3,339	2,220	209	921	473	554	
West Street	2,662	5,172	3,200	104	892	1,212	335	
Burmantofts	3,876	3,736	3,646	392	1,120	679	217	
Hunslet	4,069	4,666	3,655	267	722	558	861	
University	2,045	2,872	2,644	133	1,336	1,387	336	
Woodhouse	1,329	3,232	1,765	69	256	241	196	
Holbeck	2,903	5,522	4,662	132	1,169	2,605	504	
Armley	2,882	3,522	3,747	775	1,527	3,417	843	
Chapeltown	1,682	2,929	2,274	36	708	403	554	
St. Nicholas	3,617	2,226	2,408	151	620	955	759	
Bramley	1,830	1,858	1,947	881	1,658	730	355	
New Wortley	3,088	2,290	2,454	320	1,299	3 255	229	
Middleton	144	990	699		50	50	3	
Meanwood	24	1 223	687		17	6	• • .	
West Hunslet	313	589	470	6	102	I 4 I	28	
Harehills		221	115		19	• •		
Crossgates		144	102		I	ī	I	
Burley	-1	25	5					
Totals	34,163	44,556	36,700	3,475	12,417	16,113	5,775	

What we should very much like to have in Leeds is a central clinic on the same lines as the new "Carnegie" Welfare Centre in Liverpool, to which cases requiring special treatment could be referred and at which clinics of a special nature could be held. We hope that at some future date it may be possible to open such a centre and thus round off the Maternity and Child Welfare Scheme.

The number of new babies admitted to the centres was 4,110, as compared with 4,041 for the previous year, an increase of 69.

Of the total number of infants registered at the welcomes during the year 1,352 (or 32.9 per cent.) were under one month, and 3,114 (or 75.8 per cent.) under three months. These figures are practically the same as for 1923.

The percentage of children born during the year that attended the centres was 48. As has been remarked in previous reports, this figure should be much higher. The fact that the death-rate of welcome babies is so much lower than that of the whole City may be taken as proof of the value of the centres in saving infant life, and it may be taken that not only is death prevented but the standard of health generally is increased and the amount of damage and deformity diminished.

A list of the centres with addresses and the wards in which they are situated, together with the times when clinics are held, is given on page 136.

Infant Consultations.—The number of infant consultations at six of the centres is 3 per week, at eight 2, and at four I. In addition special morning clinics are held at 14 centres for the treatment of minor ailments, so that some of the centres are open practically the whole of the day. A clinic nurse is in charge of each centre and is responsible for all the arrangements in connection with the work of that centre. Any spare time which she may have is devoted to special cases which for one reason or another are unable to attend at the ordinary consultation hours.

Details of the work at the various centres will be found in the tables on pages 134, 137, and 138.

The following is a list of the Clinics:—

WARD.	ADDRESSES.	DAYS.	TIMES.
E.	Wesleyan School, Richmond Hill	Tues.	9.30 a.m
15.		Thurs.	9.30 a.m.
	T3	Thurs.	2 p.m.
	Do. do		2 p.m.
E.	University Club, Berking Avenue, York Road		2 p.m.
15.	Do. do. (New Babies)		9.30 a.m.
	Do. do. (Expectant Mothers)		2 p.m.
N.	39, Burmantofts Street (New Babies)		2 p.m.
44.	Do. do	~~~ .	9.30 a.m.
	Do. do	Fri.	2 p.m.
	Do. do. (Expectant Mothers)		9.30 a.m.
N.W.	Church of the Holy Name, Servia Road,		
	Woodhouse Street	Tues.	ı p.m.
	Do. do. (New Babies)	Thurs.	9 a.m.
	Do. do. (Expectant Mothers)	Thurs.	9 a.m.
M.H.	Little Queen Street, West Street	Mon.	2 p.m.
	Do. do		9 a.m.
		Wed.	2 p.m.
	Do. do. (Expectant Mothers)	Thurs.	2 p.m.
A. & W		Tues.	2 p.m.
	Do. do		2 p.m.
	Do. do	Fri.	2 p.m.
3.7	Do. do. (Expectant Mothers)	Wed.	9.30 a.m.
New	II-136 Ab Ct. A No. W. A	Man	0. 10. 20
Wor.	Holdforth Street, New Wortley	Mon. Thurs.	2 p.m.
	Do. do	Tues	2 p.m. 9.30 a.m.
Hol.			9.30 a.m. 2 p.m.
11,71.	b, Granville Terrace, Holbeck Do. do	Thurs.	2 p.m.
	Do. do	Fri.	2 p.m.
	Do. do. (Expectant Mothers)		9.30 a.m.
E.H.	Y.W.C.A. Hut, Balm Road Terminus,		<i>y y</i>
	Hunslet Carr (New Babies)	Mon.	9.30 a.m.
	Do. do	Mon.	2 p.m.
	Do. do	Fri.	2 p.m.
	Do. do. (Expectant Mothers)	Thurs.	9.30 a.m
Bak.	Back Barrack Street, off Chapeltown Road	Tues.	9.30 a.m.
	Do. do	Wed.	2 p.m.
	Do. do. (Expectant Mothers)		9.30 a.m.
S.	St. Nicholas, 205, Hunslet Road	Tues.	2 p.m.
	Do. do	Wed.	2 p.m.
T	Do. do. (Expectant Mothers)	7 5	9.30 a.m.
Bmy.		377 3	9.30 a.m.
	Do. do		2 p.m.
E.H.	Do. do. (Expectant Mothers)	Fri. Thurs.	9.30 a.m.
Hdy.	Institute, Town Street, Middleton	337 3	1.30 p.m.
W.H.		Wed.	1.30 p.m.
11.11.	(New Babies)	Mon.	9.30 a.m.
	Do. do	777 7	1.30 p.m.
	Do. do. (Expectant Mothers)		9.30 a.m.
N.	St. Aidan's School, Roundhay Road		2 p.m.
New.		ar.	2 p.m.
Hdy.		673	2 p.m.
	Do. do	Thurs.	2 p.m.
1			

<sup>\*</sup> Roundhay, Seacroft, Shadwell and Crossgates.

#### Babies under One registered during year 1924.

WELCOME.	o-i month.	I-3 months.	3-6 months.	6-12 months.	Total.
Toll			0		
Ellerby	114	125	28	20	287
West Street	161	216	67	40	484
Burmantofts	108	162	34	36	340
Hunslet	142	171	42	32	387
University	72	94	32	18	216
Woodhouse	86	123	31	41	281
Holbeck	170	19.4	52	58	474
Armley	94	135	31	40	300
Chapeltown	110	127	43	26	306
St. Nicholas	90	87	26	30	233
Bramley	32	84	18	14	148
New Wortley	101	81	16	24	222
Middleton	20	44	15	17	96
Meanwood	32	43	12	18	105
West Hunslet	11	34	29	42	116
Harehills	2	2.4	7	22	55
Cross Gates	5	16	10	13	44
Burley	2	2	2	10	16
Totals	1,352	1,762	495	501	4,110

### Babies over One registered during year 1924.

WELCOME.	I-2 years.	years.	3-4 years.	4-5 years.	Total.
Ellerby			-6		707
777 . 01	49	29	16	7	101
	51	37	26	13	127
Burmantofts	44	34	7	3	88
Hunslet	45	46	42	14	147
University	27	24	15	9	75
Woodhouse	35	30	19	6	90
Holbeck	82	64	33	13	192
Armley	48	45	43	35	171
Chapeltown	4 I	22	II	4	78
St. Nicholas	45	31	10	7	93
Bramley	21	14	10	4	49
New Wortley	25	4I	22	ΙΊ	99
Middleton	21	22	· 14	4	OI
Meanwood	15	17	6	7	45
West Hunslet	46	40	19	8	113
Harehills	16	12	5	6	39
Cross Gates	13	6	12	3	34
Burley	3	I			4
Totals	627	515	310	154	1,606

Home visits paid by Clinic Nurses during year 1924.

Welcome.	Babies under 1 year.	Babies 1—5 years.	Odd Visits.	Total Visits.	Expectant Mothers.	Total Visits to both.
Ellerby	 157	251	5	413	99	512
West Street	 366	313	17	696	81	777
Burmantofts	 285	443	37	765	260	1,025
Hunslet	 12	9	19	40	2 I	61
University	 88	53	4	145	25	170
Woodhouse	 575	355	191	1,121	168	1,289
Holbeck	 		2	2		2
Armley	 II	38		49	ΙΙ	60
Chapeltown	 90	67	15	172	56	228
St. Nicholas	 4	τ	5	10		10
Bramley	 609	421	132	1,162	170	1,332
New Wortley	 51	97	5	153	49	202
Totals	2,248	2,048	432	4,728	940	5,668

Leeds Babies' Welcome Association.—In one respect the Leeds Maternity and Child Welfare Scheme may be said to be unique, and that is in the close co-operation which exists between the official part under the control of the Corporation and the unofficial which is managed by the Leeds Babies' Welcome Association. To the latter belongs the credit of having started Maternity and Child Welfare work in the City. That was fifteen years ago, and it was not until six years later that the Association joined hands with the Corporation to form a co-ordinated scheme. Ever since that time the two bodies have worked in the closest harmony, and it is to this fact that much of the success which has been achieved is due.

The Maternity and Child Welfare Committee would be the first to acknowledge its indebtedness to the Association for the single-hearted manner in which it has carried out the duties assigned to it under the scheme and for the untiring devotion of all its workers. The voluntary worker is slowly but surely being crushed out of existence; indeed in some parts of the country she has already ceased to exist, her place being taken by the paid official. But in the very areas in which this has taken place it is to-day frankly admitted that the results have been disappointing, and efforts are being made to re-introduce the voluntary element. One hopes that it will be a long time before Leeds is persuaded to attempt such an experiment. Indeed, with a combination which has had such splendid results as that between the Council and the Babies' Welcome Association it would be foolish to interfere; rather should every attempt be made to strengthen the bond.

I am extremely indebted to the Association and its officers for all the support and practical help they have afforded me during the year.

Milk Distribution.—Particulars respecting the amount of liquid and dried milk supplied to necessitous mothers and babies attending the centres are given in the accompanying tables. As in previous years the scheme of distribution has been in the hands of a special committee composed of representatives from the Maternity and Child Welfare Committee, the Leeds Babies' Welcome Association and other outside bodies engaged in social work.

The Committee met on 49 occasions and considered no less than 8,269 applications, whilst in addition they supervized generally the work of the milk staff, details of which appear in table on page 140.

I wish once more to make acknowledgment of the excellent work performed throughout the year by this Committee and to proffer the members my thanks.

## Work of Milk Staff.

	I. Quarter.	II. Quarter.	III. Quarter.	IV. Quarter.	Year.
Applications dealt with (new)	345	236	257	258	1,096
,, ,, (repeat)	3,734	2,709	2,551	2,482	11,476
,, ,, (refused)		• •	5 •		• •
No. of re-applications	137	80	113	116	446
*No. of external cases dealt with at the office	<b>28</b> 8	170	229	262	949
	4,504	3,195	3,150	3,118	13,967
No. of visits to Welcomes paid by the milk secretaries	139	135	114	155	543

<sup>\*</sup> Persons under treatment at the Public Dispensary and the General Infirmary.

## Amount of Dried Milk Distributed in Lbs. (Year 1924).

Welcome.	Free.	Assisted.	Full Price.	Total.
Ellerby	3,269 1,462 2,472 2,704 2,808 3,559 553 1,795 25 137	2,814 1,528 1,800 3,857 1,404 1,033 3,324 984 1,349 3,118 421 1,301 29 329  555	186 552 229 734 368 546 566 510 369 183 116 196 2 57 3	9,144 6,252 6,939 7,940 5,041 3,041 6,362 4,198 4,526 6,860 1,090 3,292 56 523 11
Totals	38,668	23,846	4,624	67,138

Number of Recipients (Year 1924).

Welcome.	•	Free.	Assisted.	Full Price.	Total,
Ellerby West Street Burmantofts Hunslet University Woodhouse Holbeck Armley Chapeltown St. Nicholas Bramley New Wortley		180 128 175 122 137 55 100 72 136 166 25	83 51 72 130 76 30 107 26 63 131 28 35	23 12 41 48 22 34 53 35 30 19 26 27	286 191 288 300 235 119 260 133 229 316 79 121
Middleton West Hunslet Burley External Totals	 	59 13 19 3 162 	33  73 939	9 1 2 383	15 61 4 237 2,874

# Cows' Milk Distributed-Number of Recipients.

Welcome.	Pints (Free).	Recipients (Free).		
Ellerby West Street Burmantofts Hunslet University Woodhouse Holbeck Armley Chapeltown St. Nicholas Bramley New Wortley Middleton West Hunslet Burley			$\begin{array}{c} 1,582 \\ 1,913 \\ 839 \\ 2,008 \\ 1,944\frac{1}{2} \\ 156 \\ 3,112 \\ 3,955\frac{1}{2} \\ 3,805\frac{1}{2} \\ 400\frac{1}{2} \\ 703\frac{1}{2} \\ 1,447 \\ 974 \\ 401 \\ & & \\ & $	15 17 17 13 11 4 28 22 21 6 4 16 4
External  Totals	• •		$\frac{2,024\frac{1}{2}}{25,266}$	224

Cost of Milk Distribution Scheme for Year ended 31st December, 1924.

INCOME.  £ s.  To cash received for sale of dried milk 1,802 16		EXPENDITURE.  £ s. d.  By salaries and wages 611 11 2  ,, Cost of dried milk 4,614 14 0  ,, Cost of cows' milk 301 8 4  ,, Printing, station-
,, balance—loss 3,831 15 £5,634 12	5 — 2	ery, etc 72 3 0  ,, Superannuation Contributions 26 11 1  ,, Sundries 8 4 7  £5,634 12 2

Nett cost per head to Corporation, £1 48, 9d.

#### THE INFANTS' HOSPITAL, WYTHER.

Details of the work of the hospital are given in the appended tables. The institution continues to do excellent work, but there is great need for a hospital to deal with the ailments of children of all ages up to fourteen years. Wyther only admits infants up to five years.

#### SUMMARY OF CASES TREATED IN THE INFANTS' HOSPITAL, WYTHER.

	Males.	Females.	Total.
Remaining in Hospital, January 1st, 1924	22	17	39
Admitted during the year	92	82	I 74
Discharged during the year	77	63	140
Died during the year	23	12	35
Remaining in Hospital, December 31st, 1924	Ιţ	24	38

Mortality rate per cent. on admissions 201. Average stay in Hospital 68.7 days.

#### Classification of Admissions according to age and sex.

Males.		Females.		Total 1	Grand		
Under 1 year.	Over 1 year.	Under 1 year.	Over 1 year.	Under 1 year.	Over 1 year.	Total.	
34	58	25	57	59	115	174	

### Analysis of Deaths.

Cause.	Under	ı year.	Over	Total.	
	Males.	Females	Males.	Females	
Marasmus	10	4		• •	14
Abdominal tuberculosis		• •	2		2
Acute gastro-enteritis	2	3	I	• •	6
Tuberculous meningitis		• •		I	I
Congenital heart disease	I				I
Acute colitis	• •	• •	2	• •	2
Pulmonary and glandular tuberculosis	• •	•	I	•	I
Unresolved pneumonia bronchiectasis	I		• •	• •	I
Septicæmia	• •	I		• •	I
Broncho-pneumonia		2	I		3
Spastic diplegia	I		. · ·		I
Toxic-enteritis	• •			I	I
Cleft palate	I	• •	• •		I
Totals	16	10	7	2	35

ANALYSIS OF CASES TREATED DURING 1924.

Severe malnutrition	Reason for admission.	OI	der ne ar.	Ov or yea	ne	Total.
Bronchitis		М.	F.	М.	F.	
Total	Bronchitis Unresolved pneumonia bronchiectasis ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	I I I I I I I I I I I I I I I I I I I	I I	3 3 3 4 1 2 2 1 20 1 1 2 1 1 9 8 1 1 1 2 1 4 1	I I I I I I I I I I I I I I I I I I I	6 6 1 7 1 4 3 1 1 3 40 37 3 1 2 2 2 3 6 3 1 1 1 1 3 6 3 1 1 1 1 1 1 1 1 1 1
1 otals 42 31   72   68   21	Totals	42	31	72	68	213

Day Nursery.—The number of children who have been regular attenders either for whole or half days was 45, and the total attendances are given in the accompanying table.

Residential Nursery.—There were 23 children in residence on January 1st, 1924, 66 were admitted during the year, and 28 remained on December 31st. Ten of the children admitted were illegitimate. The average length of stay was 111.95 days. The reasons for admission were as follows:—In 26 cases, mother's illness; in 6 cases, the death of the mother; in 1 case, death of father; in 15 cases, mothers working; and in 18 cases, mothers expecting confinement.

Total Attendances of Resident and Day Children at the Nurseries, in age groups for the year ended 31st December, 1924.

		Wł	nole att	endanc	es.	Ḥа	lf atter	ndances	
	Nursery.	Under 3 years.	3-5 years.	Over 5 years.	Total.	Under 3 years.	3-5 years.	Over 5 years.	Total.
I	Red House Residential Nursery	9,895			9,895		• •	• •	• •
	Cobden Place Day Nursery	6,835	2,229		9,064	551	274	• •	825

Thanks are due to the Committee of ladies who devote so much time and thought to the work of this and the day nursery. The accompanying table gives details of the attendances during the year.

Convalescent Treatment for Mothers and Babies.—The number of mothers and babies for whom convalescence was arranged was 96 and of mothers without babies 8. The average period of stay at the convalescent homes was 13.8 days. The cost to the Corporation of this provision was £396 IIs. IId., or an average of £1 I6s.  $1\frac{1}{2}$ d. per case per week. The majority of the mothers were too poor to contribute anything towards their convalescence but 42 contributed sums varying from one quarter to three quarters of the total cost of treatment. The total sum contributed by the parents was £40 3s. 8d.

As in previous years arrangements for convalescence were made by the Leeds Children's Convalescent and Summer Holiday Fund on behalf of the Maternity and Child Welfare Committee.

In addition to the above, 175 children were sent for convalescence to the Meanwood Convalescent Home. The average stay of each child was 22.8 days, the cost to the Corporation was £591 17s. 1d., or an average of £1 os.  $8\frac{3}{4}$ d. per case per week.

As an experiment the Maternity and Child Welfare Committee decided to agree to the proposal of the Committee of Management of the Meanwood Convalescent Home to keep the home open throughout the whole year instead of only during the Spring, Summer and Autumn months, and to continue to send such children as the parents would consent to allow to go. This accounts for the greater number of children receiving benefit during the year and also for the increased cost.

#### HOUSING.

The housing problem is still as pressing as ever, not entirely for the reason that a large number of people are without houses of their own, but because of the impossibility of dealing with insanitary property until the demand for new houses has been met and a surplus created which will enable the slum population to be moved into better surroundings. As far as the public health is concerned it is much more important that we should be able to deal with our unhealthy areas than find houses for those already living under good conditions. One recognises, however, that the two problems are interdependent, and until the one is solved the other cannot be tackled. But whilst admitting that, one cannot but be impressed with the conditions of dirt and misery existing in some of our slum areas which breed disease and death and cry aloud for remedy. How long must we wait before the remedy is applied? The longer the delay the greater the cost in life and health to the City.

**Number of Houses.**—The total number of houses in the City on December 31st, 1924, was 115,289, made up of approximately 37,499 through houses and 77,790 back-to-back houses.

New houses.—The total number of new houses completed and occupied during the year was 776, of which 126 were suitable for persons of the working classes and 650 were of a larger type. These figures taken in conjunction with the long list of persons waiting for houses suggest the need for speeding up the building of working-class houses.

A comparative statement showing the number of new houses built during the last twenty-three years appears below, and a table showing the total amount of work done up to the 31st March, 1925, in connection with the New Housing Schemes appears on page 147.

TABLE SHEWING THE NUMBER OF HOUSES ERECTED IN LEEDS DURING THE LAST TWENTY-THREE YEARS, ENDED 31St MARCH, 1925.

	/	ear.			Number of Houses.			
					Trumber of Troubes.			
1903			• •		2,572			
1904			• •	• •	2,923			
1905	• •		• •		2,142			
1906	• •	• •	• •	• •	1,748			
1907	• •	• •	• •	• •	1,135			
1908		• •	• •	• •	910			
1909	• •	• •		• •	836			
1910			• •		584			
1911	• •	• •		• •	<b>5</b> 05			
1912	• •	• •		• •	350			
1913	• •	• •		• •	220			
1914	• •	• •	• •		287			
1915	• •	• •	• •		228			
1916	• •	• •	• •	• •	146			
1917	• •	• •	• •	• •	51			
1918	• •	• •	• •	• •	5			
1919	• •	<b>«</b> •	• •	• •	4			
1920	• •		• •	• •	7			
1921		• •	• •	• •	196			
1922	• •	• •	4 •	• •	1,048			
1923	• •	• •	• •	• •	1,918			
1924	• •	• •	• •	• •	618			
1925	• •	• •	• •	• •	951			
	То	IAL	• •	• •	19 693			

Housing shortage.—As a result of enquiries made on behalf of the Improvements Committee by the inspectorial staff of the Public Health Department, it was found that a considerable number of applicants for new houses on the various housing estates had left the City whilst others wished to withdraw their application. After making the necessary adjustment of the lists in accordance with the findings of the inquiry, there remained on the 31st December, 1924, a total of 4,266 names of persons waiting for houses as compared with 9,661 at the same period last year.

Overcrowding.—This is still prevalent in many parts of the City. During the year as many as 170 cases of gross overcrowding have been brought to my notice by various agencies in the City, including the Almoners Department of the Leeds General Infirmary and the Public Dispensary, the National Society Prevention of Cruelty to Children, the Guardians, etc. The matter has also had considerable attention from the Press. Without exact information, which is only possible by taking a census of the City, it is impossible to say to what extent the evil exists, but in order to help me to frame an estimate, even though an imperfect one, I arranged for a partial census of the houses to be undertaken in the Spring of the current year. The results have not yet been tabulated, but the rough figures show that, out of a thousand houses taken at random in each of the seventeen wards of the City, or a total of 17,500 houses, on the basis of 300 cubic feet per person, 1,770 (or 10.1 per cent.) were overcrowded, and that 6,143 (or 35.1 per cent.) were overcrowded when considered on a basis of over two persons per sleeping room. It would therefore seem that a good deal of overcrowding still exists, which makes it all the more urgent that the new housing schemes should be pressed forward to completion.

The number of notices served by the Department during the year was 191, some of which were abated, whilst others went by default owing to the fact that alternative accommodation was not available.

Of all the social evils which exist at the present time over-crowding is probably the worst, both from the point of view of health and of morals. Its effects on child life are bad beyond measure, and much of the ill-health and physical deformity from which the children of certain sections of the community suffer are attributable to it. No time should be lost, therefore, in tackling the problem and reducing the evil.

Unfit Houses.—The number of houses inspected and found to be unfit for human habitation was 365 as against 273 in the previous year. Of this number 239 were rendered fit during the year, whilst the remainder were in process of repair or alteration at the close of the year. In addition 20,548 houses were found defective in some respect or other and were repaired. Further details of housing work are set out in the special table on page 150.

Unhealthy Areas.—In face of the house shortage it has not been possible to proceed further with the schemes for the improvement of the West Street and Regent Street Areas. Both these require urgent treatment.

A small area situated in Ambler's Yard, Eddison Court, and Moor View, Holbeck, is now being dealt with. Closing Orders have been made upon 22 houses which owing chiefly to dilapidations due to old age are now unfit for human habitation. Most of the tenants displaced are to be re-housed in the flats which have been constructed at the disused Barracks in Chapeltown Road. The houses are not ideal but they are an immense improvement on those in Ambler's Yard, etc., from which the tenants will be displaced.

TABLE SHEWING THE TOTAL AMOUNT OF HOUSING WORK DONE TO 31st MARCH, 1925.

Name of Estate.	Sewers laid.  Length in yds.	Poads formed, pitched and ashed. Length in yds.	No. of Houses for which Contracts have been signed.	No. of Houses upon which work has been com- menced.	No. of Houses completed included in previous column.
Hawksworth Wood .	4,436	5,109	402	402	402
Wyther House	3,857	4,048	492	492	492
Meanwood	4,394	5,931	800	800	800
Crossgates	4,312	5,885	488	488	488
Middleton	3,993	5,231	697	697	68 <b>1</b>
Ivy House	Existing	Existing	46	46	46
Section 12/3 Houses	Do.	Do.	398	398	398
Demonstration Houses, Meanwood	in <b>c</b> luded	above.	6	6	6
Totals	20,992	26,204	3,329	3,329	3,313

# HOUSING, TOWN PLANNING, &c. ACTS, 1909, 1919, 1920, and THE HOUSING OF THE WORKING CLASSES ACT, 1890, Parts I. & II.

Table showing the number of houses examined by the Medical Officer of Health as part of the general survey of the town during the year ending December 31st, 1924 and the numbers represented or otherwise dealt with, pursuant to the Housing Acts, with the corresponding figures for 1922 and 1923.

corresponding figures for 1922 and 1923.			
	1922.	1923.	1924.
Number of new houses erected during the year:—  (a) Total  (b) As part of a municipal housing scheme	1,971 1,804	886 578	650 126
1. Unfit dwelling-houses. Inspection—(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing	4		
Acts)	13,474	10,048	8,3 <b>83</b>
Regulations, 1910	562	574	607
human habitation	296	273	365
to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	266	301	2 <b>; 2</b>
2. Remedy of Defects without Service of formal Notices.  Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	250	273	239
3. Action under Statutory Powers. A.—Proceedings under section 28 of the Housing, Town Planning, &c. Act, 1919.			
<ul> <li>(1) Number of dwelling-houses in respect of which notices were served requiring repairs</li> <li>(2) Number of dwelling-houses which were rendered fit:—</li> </ul>	• •		• •
(a) By owners	237	231	212
Closing Orders became operative in pursuance of declarations by owners of intention to close	• •	I	• •
B.—Proceedings under Public Health Acts.  (1) Number of dwelling-houses in respect of which notices were served requiring defects to be			
remedied (2) Number of dwelling-houses in which defects were remedied :—	27,040	20,549	21,078
(a) By owners	24,986	19,821	27,548
C.—Proceedings under sections 17 and 18 of the Housing, Town Planning, &c. Act, 1909.  (1) Number of representations made with a view			
to the making of Closing Orders (2) Number of dwelling-houses in respect of which Closing Orders were made	I.4 I	3	39 34
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	• •	• •	ΙΙ
(4) Number of dwelling-houses in respect of which Demolition Orders were made	• •	• •	1
pursuance of Closing or Demolition Orders (6) Houses represented in Unhealthy Area	5	270	9 4

#### PROPAGANDA.

Health Week in 1924 took the form of a Publicity Campaign on an extensive scale. By special posters, booklets and newspaper articles, the virtues of cleanliness were extolled. A special series of lectures with film displays on subjects connected with social hygiene were given to audiences in various parts of the City, totalling well over 4,000.

In addition, throughout the year members of the staff of the Public Health Department gave 30 addresses and lectures on health subjects to Guilds, Brotherhoods, Clubs, etc.

#### STAFF CHANGES.

- H. C. Jennings, M.B., B.S., M.R.C.S., D.P.H., Assistant Medical Officer of Health, resigned in February on obtaining the position of Medical Officer of Health to the Holland (Lincs.) County Council.
- A. Stuart Hebblethwaite, M.C., M.B., Ch.B., D.P.H., appointed Assistant Medical Officer of Health in March.
- H. de. Carle Woodcock, M.D., M.R.C.S., F.R.C.P. (Edin.), D.P.H., appointed Consulting Clinical Tuberculosis Officer in January, approved by Ministry of Health in March.
- Z. P. Fernandez, M.D., Ch.B., D.P.H., appointed in August Acting Chief Clinical Tuberculosis Officer and Assistant Medical Officer of Health for a period of 12 months to date from October 1st.

Alexandrena M. Maclennan, M.D., Ch.B. appointed in October Assistant Clinical Tuberculosis Officer as from December 1st.

D. J. Mackinnon, M.B., Ch.B., appointed in December Assistant Medical Officer for Venereal Disease.

Dorothy Priestley, M.D., B.S., appointed in December Assistant Medical Officer for Venereal Disease (part time).

Inspector Matthew Carter retired from the position of Divisional Sanitary Inspector after 35 years' service and George F. Marshall was promoted to the vacancy.

# APPENDIX.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1924 AND PREVIOUS YEARS.

TABLE I.

MINISTRY OF HEALTH TABLES.

	I.	
Ra <b>te.</b>	15.0 16.6 16.1 16.2 16.2 14.7 13.9 12.7	14.3
Number.	6,885 7,609 6,946 7,052 8,529 6,992 6,285 6,479 5,986	6,747
Rate per 1,000 Nett Births.	124 127 129 135 133 119 110 101 89	801
Number. Rate per 1,000 Nett Births.	1,324 1,253 1,216 1,023 1,023 984 899 1,232 997	921
Of Residents not registered in the District.	324 350 381 397 294 269 309 309	358
Of Non- residents registered in the District.	313 298 302 307 318 401 401 451	435
Rate.	15.0 16.5 15.9 16.5 16.5 13.8 14.1	14.5
Number.	6,874 7,557 6,867 6,962 8,452 7,099 6,725 6,424 6,589 6,128	6,824
Rate.	23.3 21.5 21.1 17.3 17.3 17.6 25.0 25.0 21.8 19.8 18.5	18.1
Number.	10,652 9,877 9,432 7,566 7,392 7,564 11,229 10,144 9,253 8,684	8,558
Un- corrected Number.	10,749 9,990 9,572 7,738 7,609 7,837 11,587 10,427 9,500 8,991	8,862
estimated to Middle of each Year.	459,260 459,260 446,349 438,254 427,589 427,589 448,913 465,500 466,700 466,700	471,600
YEAR.	1914 1915 1916 1917 1918 1920 1921 1922 1923	1924
	Middle of each Vear.  Year.  Number.  Number.  2 3 4 5 6 7 7 8 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10	Middle of each   Cur-   Number.   Rate.   Number.   Rate.   Rate.   Legistered registered registe

Total population at all ages at the 1921 Census 458,232

adjusted for the 1921 Census 465,500

Do.

 $28,089\frac{3}{4}$ 

Area of District in acres (land and inland water)

	·									The state of the s	52			O COLUMN TO SERVICE DE LA COLU							l	l		-	Ī
			Z	NUMBER	OF	CASES NOT	Notified.							TOTAL	TOTAL CASES NOTIFIED IN	NoriF	OTIFIED IN EACH	EACH		rry.				_	
				At A	Ages—Y	-Years.				-	-	_	-	-	5. 1 all	5 -	alu)	on me	Distillet.	. ا	-			HO	Total Cases
NOTIFIABLE DISEASE.	A 4 - 11											.b		.19					.1	•				-	re-
	Ages.	under 1.	1 and under 5	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and 65 and under up-65 wards	65 and up- wards	Central,	North.	North-Eas	New War	East.	South. East Hunsl	West Hunsl	Holbeck.	Min Hin.	.tsəW	North-Wes	Brunswick	New Wortle	Wortley.	Bramley. Headingley		to Hos- pital.
Small now													-		_				_			- -	-	- -	
Singli-poa	_		-	<u> </u>		ಣ	1		:		:	:	•	61		:	:	4		-		-		c	1
Cholera (C) Plague (P) Diphtheria (including Mcm-	:	:	:	:	:	•	:	:	:	:	:		:	•	:	:	:	:				• •		1 .	
branous croup)	289	<del>vijt</del>	462	140	38	2.6	_	C	-	20	1		00	10		0		1							
Erysipclas	237	г	10	-	0 0	i &	0.7	1 c	7 00	1 -	13			11 10		7 7 7	3.7		77	15				C1	268
Scarlet Fever	1,256	70	291	744	151	9 9	5	3	96							N 0	5T :	- 0	77						20
Measles	6,654	385	4,311	1.850	73	· 55	+ <del>+j</del>		196					107 750		, y	3 5	000						٦,	79
German Measles	333	6	88	212	- rc	19	н		27						164 5	080	9¢	377			186 58	$550 \mid 175$	 		100
Typhus Fever	:	:		:	)	1	•	•		H		1		- T	-	:	-	n n	× × × × × × × × × × × × × × × × × × ×	71	4	ಗರ	4 6	63	<b>င</b> ျ
Enteric Fever	c1 73		_	7	7		· cr		:	: 0		: -	· : c		: `	:	. (	:		:		:	•		, eren i
Relapsing fever (R) Continued					•	•	5		:	1	:	-	1		4	:	71	:	н	<del></del>	<b>⊢</b>	©1	•	6	∞ ∞
fever (C)	·																			<u></u>				_	On Sec.
Puerperal Fever	5.53		:		124	. cc				. 1	: 0		· : c	• •	: 7	: 0	; G	: 0	: 1	: '	: 1		:		(MATE NO. 1)
Continued High Temperature			:	:	)					•	1		,			N	N N	0	٥.		T		ତୀ	က	10
Cerebro-Spinal Meningitis	22		:	ಣ	-					: ,-		· 1			:	:	:	:	: 1	:	:	:	•		
Poliomyelitis	e e	:	٠	•						1	•	-	:	•	:	:	:		<b>→</b>	:	:	· :		<del></del>	
Ophthalmia Neonatorum	70	20							: 7	: 0	: 0	: 0	: «	• 11	-	: 0	:	: 1	• (	: 1		:			
Encephalitis Lethargica	14		ତୀ	10	17	7	. KG		+ =	. e	1 -	1 0	) G	 		ە د —	: 0	, ,	න ර	[·• 1	) 00 (	ಣ		00	:
Malaria	10		:	Η	:		o 65		н —	- -	- 0	1	) -				י מ	<b>⊣</b>	m	ا قا	31 —	<b>01</b>		-	61
Dysentery	:					)	)		4	1	<b>5</b>		-	•	:	:	7		:		•	:	•		:
rer					•	•	•		:	:	:		:	:	:	:	:	:	:	:	•	:			
Pulmonary Tuberculosis	1.191		2.6	103		. [			1 .								:	•	:	:			:		
Other Forms of Tuberquilosis	1001	H N.C	1 7	1 2	0	111	CRT	10	2 !		TOT					00 01	16	109	22	73	54 '	75 2	28 S	84 8	853
Phenimonia (Acnte primarri)	000	9 6	## C	1 1	N 0	0 1	1		10	11						19	Н	2	11	10	00	00		10	52
Do (Acute Linding)	1 0	00	5 5 5	7.61	101	191	120	$^{81}$	22	78		·	104 3	38   116	3 76	75	7	63	22	35	65°	50 5			200
Do. (Acute Innuenzal)	497	0.0	139	35	37	05.5	80	55	15	103	81	9	48 1	17 16	3 47	40	63	14	22	23					19
Totals	11,880	624	5,266	3,436	818	1,016	519	201	310	1,051	953 1	175 1,1	1,158 502	1,204	04 891	943	170	694	628	566 4	415	808	- 1	193 9	800
Isolation Hospital or Hosp	Hospitals, S	Sanatoria,	ria, &c.		Fever	-City Fever Hospital	S	Search and	Manager Comments	Killinghool	Marie Scholasson and	14 - Kat 10 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	DATA DATA DATA DA SA	Transfer in particular	and the state of	Personal	traces of the ser	T. Maria	-	- 4	-	-	4	1	8000

Hospital or Hospitals, Sanatoria, &c.:-City Fever Hospital, Seacroft and Killingbeck. In addition to the 853

Pulmonary Tuberculosis and 52 Tuberculosis (Other Forms), removed, 32 Pulmonary Tuberculosis and 1 Tuberculosis (Other Forms), were admitted to Armley 162 Pulmonary Tuberculosis and 4 Tuberculosis (Other Forms), were admitted to Gateforth Sanatorium which is outside the City. They are included in the 1,191 Sanatorium, and 1 and 180 notified.

TABLE III.

Causes of, and Ages at Death during the Calendar Year 1924.

CAUSES OF DEATH.  1 and 2 and 5 and 15 and 25 and 45 and 65 and Residents  All Under under under under under 1 year. 2 years. 5 years. 15 years. 25 years. 45 years. 65 years. wards. tions in the		Nett D	eaths at	the sub	joined ag nin or wi	ges of "thout th	Resident e Distric	s '' whet	her occu	rring	Total Deaths whether of "Resi-
2. Small-pox	Causes of Death.			under	under	under	under	under	under	up-	Residents'' in Institu-
3. Measles	1. Enteric Fever	6		• •	• •	2	3	. •	1	• •	6
4. Scarlet Fever 20 1 10 7 2 21 5. Whooping Cough 87 35 28 24 13 6. Diphtheria 27 2 4 7 13 1 26 7. Influenza 404 31 24 16 3 14 72 126 118 72 8. Erysipelas 10 1 1 2 4 2 10 9. Phthisis (Pulmonary Tuberculosis) 513 4 3 8 23 108 205 138 24 202 10. Other Tuberculous Diseases 144 18 22 25 20 23 22 10 4 76 11. Cancer, malignant disease 639 1 2 6 72 328 230 219 12. Rheumatic Fever 26 4 4 4 8 6 1 13. Meningitis 70 11 4 6 7 1 1 9 31 52 14. Gerebral Ulamorrhage, &c. 332 1 2 14 J03 212 42 15. Organic Heart Disease 748 1 14 18 62 282 371 175 16. Arterio-sclerosis 200 4 34 171 62 17. Bronchitis 643 82 22 5 4 3 27 157 343 25 18. Pneumonia (all forms) 619 183 78 52 17 15 68 104 102 146 19. Other diseases of respiratory organs 1 7 2 2 6 6 11 37 39 57 20. Diarrhoea and Enteritis 122 89 14 7 3 2 7 41 21. Appendicitis and Typhilitis 17 1 1 2 10 3 4 4 23. Nephritis and Bright's 17 1 1 2 10 3 4 4 24. Citrhosis of Liver 17 1 1 2 10 3 4 4 25. Other accidents and diseases of Fregnancy and Parturition 4 19 1 19 25. Other accidents and diseases of Fregnand Parturition 1 23 22 0 9 0 24. Other Defined Disease 163 22 7 10 16 16 29 33 50 132 25. Suicide 41 4 19 1 19 26. Congenital Debility and Malformation, including Premature Birth 4 19 1 19 27. Violent Deaths, excluding Suicide 41	2. Small-pox	• •	• •	• •	• •	• •		- • •			
5. Whooping Cough	3. Measles	46	8	28	10						14
6. Diphtheria	4. Scarlet Fever	20		1	10	7	2			• •	21
7. Influenza	5. Whooping Cough	87	35	28	24		• •				13
8. Erysipelas	6. Diphtheria	27	2	4	7	13			• •	1	26
9. Phthisis (Pulmonary Tuberculosis) 513	7. Influenza	404	31	24	16	3	14	72	126	118	72
(Pulmonary Tuberculosis) 513	8. Erysipelas	10	1				1	2	4	2	10
11. Cancer, malignant disease       639        1       2       6       72       328       230       219         12. Rheumatic Fever            4       4       4       8       6       1         13. Meningitis            1       1       9       31       52         14. Cerebral Hæmorrhage, &c.             1       2       14       103       212       42         15. Organic Heart Disease		<b>5</b> 13	4	3	8	23	108	205	138	24	202
12. Rheumatic Fever       26         4       4       4       8       6       1         13. Meningitis             1       1       9       31       52         14. Cerebral Hæmorrhage, &c.            1       2       14       103       212       42         15. Organic Heart Disease	10. Other Tuberculous Diseases	144	18	22	25	20	23	22	10	4	76
13. Meningitis	11. Cancer, malignant disease	639			1	2	6	72	3 <b>2</b> 8	230	219
14. Cerebral Hæmorrhage, &c.       332         1       2       14       103       212       42         15. Organic Heart Disease <t< td=""><td>12. Rheumatic Fever</td><td>26</td><td>• •</td><td></td><td></td><td>4</td><td>4</td><td>4</td><td>8</td><td>6</td><td>1</td></t<>	12. Rheumatic Fever	26	• •			4	4	4	8	6	1
15. Organic Heart Disease	13. Meningitis	70	11	4	6	7	1	1	9	31	52
16. Arterio-sclerosis       209           4       34       171       62         17. Bronchitis	14. Cerebral Hæmorrhage, &c.	332				1	2	14	103	212	42
17. Bronchitis        643       82       22       5       4       3       27       157       343       25         18. Pneumonia (all forms)        619       183       78       52       17       15       68       104       102       146         19. Other diseases of respiratory organs        111       7       7       2       2       6       11       37       39       57         20. Diarrhœa and Enteritis       122       89       14       7        3       2       7       41         21. Appendicitis and Typhlitis       32         1       7       3       6       10       5       41         22. Cirrhosis of Liver        17        1        1        2       10       3       4         23. Nephritis and Bright's Disease       209         1       3       9       26       76       94       80         24. Puerperal Fever        9           9          11	15. Organic Heart Disease	748	• •		1	14	18	62	282	371	175
18. Pneumonia (all forms)        619       183       78       52       17       15       68       104       102       146         19. Other diseases of respiratory organs        111       7       7       2       2       6       11       37       39       57         20. Diarrhœa and Enteritis        122       89       14       7         3       2       7       41         21. Appendicitis and Typhlitis       32         1       7       3       6       10       5       41         22. Cirrhosis of Liver        17        1        1        2       10       3       4         23. Nephritis and Bright's Disease        209         1       3       9       26       76       94       80         24. Puerperal Fever        9           9         11         25. Other accidents and diseases of Pregnancy and Parturition	16. Arterio-sclerosis	209	•			• •		4	34	171	62
19. Other diseases of respiratory organs	17. Bronchitis	643	82	22	5	4	3	27	157	343	25
organs	18. Pneumonia (all forms)	619	183	78	52	17	15	68	104	102	146
21. Appendicitis and Typhlitis       32        1       7       3       6       10       5       41         22. Cirrhosis of Liver        17        1        1        2       10       3       4         23. Nephritis and Bright's Disease        209         1       3       9       26       76       94       80         24. Puerperal Fever        9          9         11         25. Other accidents and diseases of Pregnancy and Parturition       24          4       19       1        19         26. Congenital Debility and Malformation, including Premature Birth       268       266       2 <td></td> <td></td> <td>7</td> <td>7</td> <td>2</td> <td>2</td> <td>6</td> <td>11</td> <td>37</td> <td>39</td> <td>57</td>			7	7	2	2	6	11	37	39	57
22. Cirrhosis of Liver       17       1       1       2       10       3       4         23. Nephritis and Bright's Disease       209       1       1       3       9       26       76       94       80         24. Puerperal Fever       9       1       9       11         25. Other accidents and diseases of Pregnancy and Parturition       24       4       19       1       19         26. Congenital Debility and Malformation, including Premature Birth       268       266       2       140       10       1       19         27. Violent Deaths, excluding Suicide       183       22       7       10       16       16       29       33       50       132         28. Suicide       41       1       13       22       6       9         29. Other Defined Diseases       1,177       161       23       16       27       37       115       306       492       499         30. Diseases ill-defined or un-       11       11       12       14       14       15       15       15       15       15       15       15       15       15       16       27       27       26       29       26       26	20. Diarrhœa and Enteritis	122	89	14	7			3	2	7	41
23. Nephritis and Bright's Disease       209        1       3       9       26       76       94       80         24. Puerperal Fever        9          9         11         25. Other accidents and diseases of Pregnancy and Parturition       24         4       19       1        19         26. Congenital Debility and Malformation, including Premature Birth       268       266       2	21. Appendicitis and Typhlitis	32		• •	1	7	3	6	10	5	41
Disease	22. Cirrhosis of Liver	17		1	• •	1		2	10	3	4
25. Other accidents and diseases of Pregnancy and Parturition	D:	209			1	3	9	26	76	94	80
of Pregnancy and Parturition	24. Puerperal Fever	. 9		• •	• •	• •		9	• •	• •	11
26. Congenital Debility and Malformation, including Premature Birth       268       266       2	of Pregnancy and Partu-	94					4	19	1		19
Suicide	26. Congenital Debility and Malformation, including										
29. Other Defined Diseases 1,177 161 23 16 27 37 115 306 492 499 30. Diseases ill-defined or un-	27. Violent Deaths, excluding Suicide	. 183	22	7	10	16	16	29	33	50	132
30. Diseases ill-defined or un-	28. Suicide	. 41		• •				13	22	6	9
11 7 0	29. Other Defined Diseases .	. 1,177	161	23	16	27	37	115	306	492	499
	1	. 11	1	2		• •		. •	3	5	
Totals 6,747 921 270 202 173 275 786 1,804 2,316 2,195	Totals	. 6,747	921	270	202	2 173	275	786	1,804	2,316	2,195

TABLE IV.

FANT MORTALITY. CALENDAR YEAR 1924. NETT DEATHS FROM STATED CAUSES AT VARIOUS AGES UNDER I YEAR OF AGE.

		)					OF A				2.0
Causes of Death.		Under 1 week.	1–2 weeks.	2–3 weeks.	3–4 weeks.		4 weeks and under 3 months.	3 months and under 6 months.	months.	9 months and under 12 months.	Total Deaths under 1 year.
Small-pox				• •							
Chicken pox		••	• •								
Measles							1		4	3	8
Scarlet fever											• •
Whooping Cough							5	5	16	9	35 .
Diphtheria								1	1		2
Influenza			2		1	3	6	5	6	11	31
Erysipelas			• •	• •						1	1
Tuberculous Meningitis							1	3	2	6	12
Abdominal Tuberculosis		• •						2	1.		3
Other Tuberculous Disease	es			• •				3	3	1	7
Meningitis (not Tuberculou	ıs)				1	1	1	3	5	1	11
Convulsions		7	5	7	2	21	16	8	6	4	55
Bronchitis			2	5	7	14	28	15	18	7	82
Pneumonia (all forms)		• •	3	4	4	11	28	32	47	65	183
Other diseases of respirate organs			1	• •		1		2	2	2	7
Diarrhœa			-					_			
Enteritis		• • •	7	2	6	15	9	29	25	11	89
Gastritis			• •				1	2			3
Syphilis		2	4	3	1	<b>1</b> 0	9	6	2		27
Rickets				• •			1	1			2
Suffocation, including overly	ing	7	• •	• •		7	3	4	• •		14
Injury at birth		17	5	1		23	2				25
Atelectasis		14	1		2	17	2		• •		19
Congenital Malformations		14	6	• •	1	21	9	6	1	1	38
Premature birth		106	18	7	5	136	6	2			144
Atrophy, Debility and Marasmus	· ·	14	7	9	2	32	19	23	9	1	84
Other Causes		4	5	5	5	19	9	3	$\begin{bmatrix} 9 \\ 2 \end{bmatrix}$	6	39
		I	J	J		1 57	<i>i</i> ,	U	2	J	00
Totals		185	66	43	37	331	156	155	150	129	921

